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AMERICAN JOURNAL OF NUMISMATICS

VOLUME XLVI

1912



PUBLISHED QUARTERLY BY
THE AMERICAN NUMISMATIC SOCIETY
NEW YORK

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THE AMERICAN NUMISMATIC SOCIETY
156TH STREET, WEST OF BROADWAY
NEW YORK

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AMERICAN JOURNAL OF NUMISMATICS.

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Ipse domi, simvl ac nvmmos contemplor in arca.
— *Horatii, Sat. I, i. 66.*

VOL. XLVI: No. 1.

NEW YORK.

JANUARY, 1912.

PRIVATE GOLD COINAGE.¹

V.

(Continued from Vol. XLV, p. 191.)

SHULTZ & CO., SAN FRANCISCO.

1851.

THE firm of Shultz & Co. was composed of Judge G. W. Shultz and William Thompson Garratt, who conducted a brass foundry in San Francisco, on Clay Street, back of Baldwin's coining establishment, as early as 1850, and made nearly all of the dies used in that city for private coinage. In a biographical sketch of Mr. Garratt in "Builders of a Great City," published in San Francisco in 1891, this statement was made:

William T. Garratt was born at Waterbury, Conn. Judge Shultz and he went into business in October, 1850, making all the dies in use in San Francisco for private coining except those of Moffat, whose \$50 slugs will be remembered by all old-timers. Albert Küner did the engraving for these dies. Besides the actual manufacture of the dies the firm also coined Five Dollar pieces. Owing to a scarcity of coin in circulation, the firm built the machinery for coining Five and Ten Dollar pieces, and continued this until the Legislature passed a law placing private coiners on a banking basis, and on account of this law they discontinued. The firm coined for Burgoyne & Co., and Argienti & Co., brokers. This department of the business had been under the management of Mr. Shultz, and when it was given up he retired. Garratt was originally a mechanic by trade.

In a dictated statement Mr. Garratt gave the following information in regard to the conduct of the coining establishment with which he and Mr. Shultz were connected:

We made a great many dies for private coining. Albert Küner, who is still in business here, would do the engraving and I the turning — that is, the machine-work on the dies — for which at the time we would get \$100 per day per man on that special job.

After that, Shultz took a notion to go into coining for Burgoyne & Co. and Argienti & Co., who were bankers here at that time. They would buy the dust and we would do the coining. We ran for a while, and then Shultz and I separated, he taking the coining establishment and I the foundry, he keeping the room over the foundry for his business. He

continued only a short time before the Legislature passed a law prohibiting private coining. We took gold at \$16 an ounce, and put it through the refining process, and then would add 10 per cent. copper. That of course would take a very little copper—just enough to make the coin hard enough to wear. I think the Legislature prohibited it altogether; I am not exactly clear on that point. Moffat was allowed to go ahead. We continued in the same place after Shultz had quit. We had moved from Clay Street down to Leidersdorff, near Sacramento. While we were there we separated. He continued coining until he was shut off by the Legislature; it might have been two months. From that he went up into the mountains, and I continued with the business.

Judge Shultz was connected with the Gold Mountain Quartz Mining Company.

One biographer stated that Messrs. Shultz and Garratt, in connection with their foundry business, also struck Five and Ten Dollar gold-pieces, for which there was a great demand. Only Five Dollar coins bearing their stamp are now known, however, and it is not probable that the firm issued Ten Dollar pieces.

In Mr. Garratt's statement he says he coined pieces for Burgoyne & Co. and Argienti & Co. from gold-dust furnished by them. It is probable that all such coins bore the name of Schultz & Co., as no specimens having the private stamp of either of the above concerns, — both of which were prominent banking firms in San Francisco, — are known. The only piece of currency credited to Burgoyne & Co., so far as known, was a Twenty-five Cent paper note. This was issued in the early 'fifties, and specified that it was redeemable in gold-dust. The plates for this were engraved by J. Manouvrier and T. Snell, of New Orleans, who engraved those for some of the Confederate paper-money issues.

45 — *Five Dollars.* *Obverse,* Head of Liberty to left, surrounded by thirteen stars. On the coronet, SHULTS & CO. [The spelling of the name is an error on the part of the engraver, Mr. Küner, as Mr. Shultz unquestionably wrote his name with a Z instead of an S.] Below is the date, 1851. *Reverse,* An eagle with expanded wings, shield on breast, and holding arrows and an olive branch, much like the eagle used on the other coins of the series. Around the upper portion of the border, PURE CALIFORNIA GOLD. Below is the denomination, FIVE D.

Three coins with this stamp were assayed at the Mint in 1851; they averaged in weight 128 $\frac{3}{4}$ grains, a fineness of .879, and showed an intrinsic value of \$4.94.4. Only three specimens are known. One is owned by H. O. Granberg; the second by Virgil M. Brand, and the third is in the Lighthouse collection.

DUNBAR & CO., SAN FRANCISCO.

1851.

From what can be learned, the gold-pieces bearing the above stamp were issued by Edward E. Dunbar, who conducted the California Bank in San Francisco. Mr. Dunbar afterwards came East and organized the well-known Continental Bank Note Company. An advertisement appeared in one of the

California papers that "The banking office of Edward E. Dunbar would redeem the coin of Baldwin & Co." This was at the time when the issues of Baldwin & Co. were discredited in San Francisco because they were below the value stamped upon their face, and business men in general had refused to take them. As Baldwin & Co. ceased to strike coins about this time, it is not unlikely that their machinery was taken over by Dunbar & Co., and used for making the coins bearing the latter stamp. Only one denomination was struck by the firm, that of Five Dollars, a description of which follows :

46—*Five Dollars.* *Obverse*, Head of Liberty, surrounded by thirteen stars. On the coronet, DUNBAR & CO. Below is the date, 1851. *Reverse*, An eagle with expanded wings. On the breast is a shield, while the talons hold an olive branch and arrows. Around the border, S M V CALIFORNIA GOLD. Below is FIVE D.

A lot of 111 pieces was assayed at the Mint in 1851, which showed an average weight of 131 grains, a fineness of .883, and an intrinsic value of \$4.98. Not more than three of these pieces are now known to be in existence. The only record of sale was the example in the Cleneay collection, sold Dec. 9-13, 1890, when a Five Dollar piece, dated 1851, brought \$6.50. Charles Gregory owns probably the finest known specimen from this mint, and through his kindness we are enabled to show it on one of the plates ; H. O. Granberg owns the second located specimen, and Virgil M. Brand the third.

WASS, MOLITOR & CO., SAN FRANCISCO.

1852-1855.

The firm of Wass, Molitor & Co. was composed of Count S. C. Wass and A. P. Molitor, the other member, if there was one, being unknown. The earliest reference to their establishment of a gold smelting and assaying plant is found in the "San Francisco Herald" of November 19, 1851, which reads as follows :

Messrs. Wass, Molitor & Co. have removed their establishment into Naglee's fireproof building, in Merchant Street, where they are now busily engaged in smelting ores of all kinds, melting down and assaying gold for the largest houses in the city, and attending generally to all business connected with mining, for which their scientific attainments and long experience eminently fit them. They have now an excellent laboratory, fitted up in the most approved style, with powerful furnaces and every species of apparatus required for the most delicate and accurate analyses.

These gentlemen have acquired a thorough and practical knowledge of mining in all its ramifications, in the celebrated School of Mines of Germany ; having perfected that knowledge by working in the gold mines of their native land — Hungary — for many years, and later those of this country. This establishment therefore is almost the only one in California capable of making those delicate assays which are so much needed just at this time.

They are prepared, too, to furnish mining plans and information as to the best and cheapest method of working the mines, which will be invaluable at the present time, when attention is so much directed toward them. We consider the scientific experience of these gentlemen a

valuable acquisition to the State. They are compatriots, and were companions-in-arms of the heroic Kossuth throughout the memorable Hungarian revolution. Their hope of liberty in their native land crushed, their fortunes confiscated, and themselves exiled by the ruthless Austrian, they have sought a home in our land, the refuge of the oppressed of every nation.

The announcement of the beginning of operations of the establishment of Wass, Molitor & Co., appeared November 25, 1851, in the "San Francisco Herald":

ASSAY OFFICE. — IMPORTANT ADVANTAGE. — The subscribers are now ready to melt and assay gold-dust, and will pay to parties depositing the dust the net proceeds as soon as the dust is melted and assayed, less the usual percentage for melting and assaying.

The advantage in this arrangement is that the depositor gets his money within forty-eight hours after depositing the dust.

WASS, MOLITOR & Co.
Merchant St., Naglee's Building.

The "San Francisco Herald" of the same date, also made the following editorial comment upon the opening of the assaying establishment of Wass, Molitor & Co.:

It will be seen from the announcement of Wass, Molitor & Co. that the public have a prospect of being relieved from any great addition to the torrent of cumbrous slugs that has for the last nine months been inundating the country. These gentlemen, of whose peculiar fitness as smelters and assayers we have heretofore spoken, are prepared to receive gold-dust, melt it down, and by assay determine its mint value. Then, deducting the usual percentage for their labor, they will pay over to depositors the net proceeds of their gold in forty-eight hours from the time of deposit. The United States Assay Office, we are informed, makes a return — and that return in slugs — in eight days from the time of deposit. By this new arrangement therefore, the depositor not only saves six days' use and interest on his gold, but relieves the currency from the addition of as many slugs as his gold could be coined into. Messrs. Wass, Molitor & Co. pay over the proceeds in any coin that may be current at the banks. They do not of course undertake to coin, themselves. Their establishment will be a great convenience to the public, while it will, to the extent of the business done by them, check the incessant stream of unwieldy slugs that clog the ordinary transactions of business to a most serious extent.

In the latter part of 1851, when the only coins struck in California were the octagonal Fifty Dollar pieces, there occurred a famine of gold of small denomination in the channels of trade, owing to the fact that regular United States gold coins and the foreign coins authorized to be received at the Custom House were hoarded and reserved for this purpose and for foreign shipment. A substitute gold currency was urgently required, and therefore the business men of San Francisco petitioned the firm of Moffat & Co. to strike gold coins of small denominations bearing their private stamp, to supply this need. Wass, Molitor & Co., recognizing this necessity, began the issue of a

Five Dollar piece bearing their own stamp, which was gladly welcomed, the first one apparently making its appearance about January 8, 1852, to which "Daily Alta California" of that date makes reference :

Day before yesterday we were shown a piece of the denomination of \$5, which Messrs. Wass, Molitor & Co. are preparing to issue from their assay office, Naglee's building, in Merchant Street. It has the head and stars like the American coin, with the letters W M & CO in the place occupied by the word LIBERTY on our National currency. Below is the date, 1852. On the reverse is the eagle, with the words "In California Gold — Five Dollars" around it. The coin has the pale yellow appearance which is peculiar to the private coinage of the State, and which is caused by the silver alloy natural to the gold, whereas the issues from the United States mint are slightly alloyed with copper.

On the same date as the above the "San Francisco Herald" had this comment to make upon the appearance of the new specimen of private coinage :

The very serious inconveniences to which the people of California have been subjected through the want of a mint, and the stream of unwieldy slugs that have issued from the United States Assay Office have imperatively called for an increase of small coin. The well known and highly respectable firm of Wass, Molitor & Co. have come forward in this emergency, and are now issuing a coin of the value of \$5 to supply the necessities of trade. Their coining establishment, located in Naglee's fireproof brick building, in Merchant Street, is now complete, being provided with the most powerful and improved machinery for such purposes.

The mechanical execution of the coin issued by these gentlemen certainly reflects the highest credit upon their skill. It is a beautiful specimen of art, far superior in finish to anything of the kind ever gotten up in California. It is surrounded by a raised milled edge to protect the surface from being defaced by friction, and is almost a *fac-simile* of the United States coin. On one side, surrounded by a circle of thirteen stars, is a finely engraved head of Liberty, around which is a band bearing the letters W M & CO, being the initials of the coiners. Beneath is the date of its issue, 1852. On the reverse is an eagle, bearing in its talons a bundle of arrows and an olive branch. Just within the milled edge is the inscription, — In California Gold Five Dollars.

But the most important point to the public is its fineness and weight, as upon these two qualities combined must depend its value. In this particular it will be found highly satisfactory, and at once secure the confidence of the community. It has a uniform standard of .880, and contains no other alloy than that of silver, which is found naturally combined with gold. The weight of each of the \$5 pieces, which are the only ones at present issued, is $131\frac{1}{8}$ grains.

The standard fineness of the United States Five Dollar piece is .900, weight 127 grains. It is therefore $1\frac{3}{8}$ finer than Wass, Molitor & Co.'s pieces, but this is more than counterbalanced by the latter's being $4\frac{1}{8}$ grains heavier, so that the new Five Dollar gold piece is in reality worth five dollars and four cents, a sufficient excess to pay the expense of recoinage at the United States Mint without cost to the depositor.

The reason Messrs. Wass, Molitor & Co. have adopted the standard of .880 is because this is about the average fineness of California gold, and further because the cost of refining California gold to the United States standard is exceedingly heavy, and the necessary chemicals cannot be obtained in this country. But it will be remembered that the difference is more than

made up by the increased weight of $4\frac{9}{16}$ grains, which every one can try for himself on a pair of scales. These coins will be redeemed on presentation in funds received at the Custom House and banks. The high reputation for honor and integrity enjoyed by Count Wass and his associates in this enterprise is an additional guaranty that every representation made by them will be strictly complied with. The public will be glad to have a coin in which they can feel confidence, and which can't depreciate in their hands. The leading bankers, too, sustain and encourage this issue, and will receive it on deposit. Among others are the heavy houses of Adams & Co., Burgoyne & Co., and Page, Bacon & Co.

Messrs. Wass, Molitor & Co.'s coining establishment, which is entirely disconnected from the smelting and assaying office, now in active operation, is capable of turning out from \$7,000 to \$8,000 in Five Dollar pieces per day. We shall in a future article give a description of the minting process by which through many stages the crude gold-dust is converted into coin.

This description, as promised, appeared in the "Herald" of January 17, 1852, and as it is regarded as being of much interest to the reader, the full text is herewith given: —

We gave a detailed description a few days ago of the new Five Dollar piece issued by this enterprising firm. Since then they have prepared a die for coining Ten Dollar pieces, some of which we have seen struck off. They are superior in mechanical execution to the Five Dollar pieces, and will compare favorably with any coin now in the market. They are similar to the smaller coin, with the exception of being stamped on one side, "s m v (standard mint value) Ten Dollars." A quantity of their coin has been sent on to the Mint by the bankers who receive it, so that by an official assay the public may be entirely satisfied that it is worth all it purports to be.

The process by which the crude gold-dust is converted into coin is quite intricate and interesting. The metal has to pass through half a dozen different stages in the hands of a dozen workmen before it is turned out of the press ready for circulation. In the first place the dust is placed in suitable vessels and smelted by the heat of a powerful furnace. In its molten state it is run into thick bars or ingots. These are separately assayed with extreme care and nicety by Count Wass. The fineness of each bar being ascertained, silver is either added or subtracted, according as it is above or below the standard fineness, so as to attain a uniform mixed degree of purity. It will be remembered that there is no alloy of copper in these coins, as in those issued from the United States Mint, and hence they have a lighter yellow color.

After the bars have been made of a requisite fineness they are resmelted and cast into smaller bars. These are hammered out, then drawn through slits in a powerful machine — the width of the slit being diminished. By this means it is made to assume the shape of a golden hoop. It is then drawn through a powerful rolling machine, graduated to the required thickness, from which it issues a long, thin strip, brightly polished, and of the thickness of the coin. It is then placed under another ingenious machine in which it is cut up into circular pieces the size of the proposed coin. These pieces are separately adjusted to the standard weight in very nice scales prepared for the purpose. If they weigh a little too much, as they always do, they are reduced by filing. They are now ready to be stamped.

The first stage in this process consists in placing them in a milling machine of great power. From this they receive a neat, raised milled edge. Nothing remains now but to place them in the press, where they are stamped. This press operates on the principle of the screw. The circular piece of gold — the embryo coin — is placed upon a die which is to give its im-

press to one side, while another die, which stamps the other side, is made to descend with great force by whirling the heavy loaded arms of a lever passing through the screw. It is a current Five or Ten Dollar piece, as the case may be. The finishing touch is put to it by roasting it, so as to give it a bright color. All these different processes of course require great scientific and mechanical skill, extreme accuracy, and heavy and complete machinery. All of these requisites Messrs. Wass, Molitor & Co. possess.

The firm issued coins of the denomination of Five, Ten, Twenty, and Fifty Dollars. The first issue in 1852 included the denominations of Five and Ten Dollars. No pieces bearing the stamp of the firm were coined in 1853 or 1854, but in 1855 they began the striking of Fifty and Twenty Dollar pieces, the latter of which are now of extreme rarity. The Fifty Dollar piece, which is circular in shape, came into being about the time the business men of San Francisco petitioned Congress to strike such coins at the United States Mint, and it must have made its appearance some time in the Spring of 1855, judging by the following extract from the "Sacramento Daily Union" of April 30, 1855 :

Col. Pardee of Wells, Fargo & Co.'s Express has exhibited to us the new Fifty Dollar piece, which in a great measure is destined to supplant the old-fashioned octagon slug now in circulation. This coin is circular, almost entirely destitute of ornament, and plain as a maiden's countenance who has breathed the air of fifty summers. At the outer edge of one side are the words "Wass, Molitor & Co. San Francisco," inclosing on the centre of the coin the figures "900" and abbreviated word "Thous." with the figures "50" underneath, and the word "Dollars" below the latter figures. On the reverse of the coin is a homely head of Liberty and the figures "1855." The coin certainly has no pretensions to beauty; nevertheless we would not like to refuse a few to break with our friends.

Evidently the Fifty Dollar pieces of this firm were struck in considerable numbers, and are not very rare even at the present time, yet well-preserved specimens command a substantial premium. Perhaps the record price for one of these coins was \$400, paid for a very fine example at the Bruce Cartwright sale in London.

Proof of the considerable volume in which the gold Twenty and Fifty Dollar pieces of this firm were originally issued is furnished by the statement contained in "Alta California" of May 16, 1855, that "Wass, Molitor & Co. have commenced issuing their Fifty and Twenty Dollar pieces at the rate of \$38,000 per day. The coin is above the United States standard, and is confidently received throughout the State."

1852.

47 — *Ten Dollars.* *Obverse*, Head of Liberty (a small head). On the coronet is W M & CO. Around the border are thirteen stars, and below is the date, 1852. *Reverse*, An eagle, shield on breast, with an olive branch in its right talon and three arrows in the left. The olive branch points above the lower part of the latter s. Around the border is S M V CALIFORNIA GOLD TEN D. The borders are beaded and the edge reeded.

48 — *Ten Dollars.* *Obverse*, Liberty (a large head), thirteen stars, and the date, 1852. *Reverse*, Similar to 47, but from a different die, the olive branch pointing below the s. The borders beaded and the edge reeded.

49 — *Five Dollars.* *Obverse*, Head of Liberty to left, surrounded by thirteen stars. On the coronet the letters W M & CO., while below is the date, 1852. *Reverse*, An eagle bearing a shield upon its breast, with three arrows and an olive branch in its talons, and surrounded by the legend, IN CALIFORNIA GOLD.

There is only one type of the Five Dollar piece, which is quite similar in general design to the regular United States Five Dollar coin, but there are a number of trifling die varieties.

1855.

50 — *Fifty Dollars.* *Obverse*, Head of Liberty to the left, surrounded by thirteen stars. Below is the date, 1855. *Reverse*, Two branches of laurel crossed and forming a wreath, within which, in two lines, 50 DOLLARS. Just above the figures 50 is the fineness on a label, 900 THOUS. Around the border at the upper portion, SAN FRANCISCO CALIFORNIA, and around the lower portion, WASS, MOLITOR & CO. Border beaded and edge reeded. Circular.

51 — *Twenty Dollars.* *Obverse*, Small head of Liberty, with W M & CO on the coronet. Around the border thirteen stars, with the date 1855 below. *Reverse*, An eagle with outstretched wings, an olive branch in its right and three arrows in its left talons. Above, on a label, 900 THOUS. Around the border, SAN FRANCISCO CALIFORNIA TWENTY DOL. The edge is reeded.

The only example of this denomination that has been offered in recent years, brought \$500 at one of the Elder sales. A. Reimers of San Francisco also owns an excellent specimen.

KELLOGG & CO., SAN FRANCISCO.

1854-1855.

John Glover Kellogg, the senior member of the firm of Kellogg & Co., came from Auburn, N. Y., to San Francisco, October 12, 1849. He secured a position with Moffat & Co., who were then in the coining business at the corner of Clay and Dupont Streets. He continued with this establishment when it passed to the control of Curtis, Perry & Ward, who conducted their assay office in the building of the old United States Mint on Commercial Street. When the United States Assay Office ceased operations, on December 14, 1853, Mr. Kellogg opened one of his own with G. F. Richter, who had been employed as an assayer at the United States Assay Office, and began business at 106 Montgomery Street, December 19, 1853, as Kellogg & Richter. The following advertisement appeared in the "San Francisco Herald" of that date:

ASSAY OFFICE. — The undersigned, who have been connected with the United States Assay Office from its commencement, have opened an office for melting and assaying gold in the basement of J. P. Haven's building, No. 106 Montgomery Street, one door of Lucas, Turner & Co.'s banking house, and nearly opposite Adams & Co.

KELLOGG & RICHTER.

Under this advertisement was the following indorsement :

SAN FRANCISCO, Dec. 19, 1853.

Messrs. Kellogg & Richter have been employed (the former as cashier and the latter as practical assayer) in the United States Assay Office from its commencement to its close. We take pleasure in bearing testimony to their industry, integrity, and skill, and in commending them to the confidence and patronage of the public.

CURTIS & PERRY,
A. HUMBERT, *Late U. S. Assayer.*

In January, 1854, owing to the great scarcity of gold coin with which to carry on ordinary business, the United States Assay Office having ceased operations and no private firm at that time striking gold, a petition was addressed to Kellogg & Richter requesting them to issue gold coins bearing their stamp, the text of which follows :

SAN FRANCISCO, Jan. 14, 1854.

MESSRS. KELLOGG & RICHTER, Assayers.

Gentlemen :—The undersigned bankers of this city and State, perceiving the results which would follow our continued shipments of coin, would respectfully submit your attention to this want of the public, and if possible that you will supply the vacuum until the Mint shall go into operation, and remove the chances of financial embarrassment from this cause, by the issuing of your own private coin. Your long connection with the late Government Assay Office of Messrs. Curtis, Perry & Ward gives us confidence in your ability and integrity, and that you will conduct this business with a proper regard to the rights of the community, as well as your own private emolument. Such coin we shall be willing to receive.

Page, Bacon & Co.
Burgoyne & Co.
James King of Wm.
Tallant & Wilde.
Drexel, Sather & Church.
Robinson & Co.

Adams & Co.
Lucas, Turner & Co.
Wells, Fargo & Co.
Carothers, Anderson & Co.
Palmer, Cook & Co.
Sanders & Brenham.

SACRAMENTO.

A. G. Richardson, Agent.
B. F. Hastings & Co.
M. McNair, Agent.
D. O. Mills & Co.

Gwin & Rumbar.
Read & Co.
Page, Bacon & Co.
Jno. M. Rhodes.

In response to this petition Kellogg & Richter on January 31, wrote the subjoined letter :

SAN FRANCISCO, Jan. 31, 1854.

Gentlemen :—Your letter under date of Jan. 14, requesting us to issue our own private coin is at hand. We shall be able to comply with your request ten days from this date. With many thanks for your expressions of confidence in our ability as Assayers, and in our integrity, we remain,

Yours truly,

KELLOGG & CO.

To Messrs. Page, Bacon, Adams & Co., and others, Bankers.

The first coin to be issued by Kellogg & Co. was on February 9, 1854, as will be seen by the following reference in "Alta California" of February 16, 1854:

Messrs. Kellogg & Richter have established a private coining house on Montgomery Street, in the basement of the building adjoining Adams & Co.'s old banking house. They issued their first coin on the 9th. It is like United States coin, except that in place of LIBERTY on the head are the words KELLOGG & CO. They expect to be able to issue \$20,000 per day.

The "San Francisco Herald" of February 11, makes this reference to the new issue:

We have seen to-day the first issue of the new Twenty Dollar pieces issued by Messrs. Kellogg & Richter. It is an exact and very handsome imitation of the United States coin, the only difference being the motto upon the cap of the Goddess of Liberty which adorns one side of the coin. On the front of the cap are the words, KELLOGG & CO. inscribed in the place of the word LIBERTY which marks the regular piece. The appearance of the new coin is highly creditable to Kellogg & Co., who enjoy in the highest degree the confidence of the business community. We learn that they will be able to issue about \$20,000 per diem with their present arrangements, which will probably be speedily improved and their facilities for coinage increased.

The "San Francisco Prices Current" of February 15, 1854, had this to say in connection with the opening of the new United States Mint:

We have to notice that the alterations of the old Assay Office of Curtis, Perry & Ward are progressing well, the additions and changes being by virtue of a contract for the erection of the United States Mint Buildings and the supplying of suitable machinery. To supply any deficiency or vacuum which may arise before the Mint can commence operations, or indeed afterward, we have to notice that Messrs. Kellogg & Richter, Assayers, have commenced the issue of private coin, the first pieces of this stamp, "Kellogg & Co." having made their appearance this week, and of the denomination of \$20. They are similar in their general style to the United States coins, but easily distinguishable by their yellow appearance, which is the natural color of California gold, while the peculiar appearance of the regular Double Eagle is the result of copper alloy.

Enormous amounts were struck at the Mint of Kellogg & Co. at this time, to fill the demand for coined gold, it being the only establishment for this purpose then in operation, and the gold produced by the mines reaching an extraordinary volume, to which the "Prices Current" of March 31, refers:

We question whether there ever was a fortnight since the California mines were discovered during which so much gold-dust came down to San Francisco as during the fortnight just passed, and in connection with the product of gold, and in intimate connection, too, we deem it not misplaced to call public attention to the admirable manner in which the Assay Office (Kellogg & Richter) in this city is conducted, and the very important part it has performed during the past month in preventing any disarrangement of our financial matters; for without the coining of the dust which it has done we might have found ourselves forced to return to weighing it out for payment.

Even though the Branch Mint had begun operations, but few pieces were struck, owing to the scarcity of silver for alloying and refining purposes, and the few denominations of \$1, \$2.50, \$5, and \$10 were made in order to test the machinery. The bulk of the work of coin-making therefore fell upon Kellogg & Richter.

In the latter part of 1854 the firm of Kellogg & Richter was dissolved, and reorganized as Kellogg & Humbert, the new member being Augustus Humbert, the former United States Assayer, and this partnership lasted until 1860, although the firm ceased to strike coins in 1855.

Notwithstanding the operation of the United States Branch Mint Kellogg & Humbert issued coins in 1855 in even greater volume than before. On May 1, 1855, the "Alta California" announced that the Branch Mint had just resumed coining, and further stated that the principal assay office in the country (Kellogg & Co.) effected over 50 per cent. more toward the supply of coin than the United States Mint. It is said that \$1,500,000 was the greatest amount per month produced by the Mint, while the assay office had for weeks manufactured from \$60,000 to \$80,000 daily, and every banker in the State admitted that but for the assay office the financial crisis would have been prolonged. To this office, the paper continued, the holders of bullion had to look for coin, and but for this private mint San Francisco might have been bankrupt.

Although the California papers in 1855 mention the Fifty Dollar piece of Wass, Molitor & Co., yet they do not contain the slightest reference to that of Kellogg & Co. (that could be found), which would seem to indicate that coinage of that denomination did not go beyond the experimental stage, and that the thirteen known pieces now located were scarcely more than trial pieces.

In 1905 the late De Witt Smith of Lee, Mass., compiled a list of the known Kellogg & Co. Fifty Dollar pieces, and their holders: Nos. 1, 2, 3 are owned by the Kellogg family (one by Karl Kellogg, son of J. G. Kellogg); 4, United States Mint; 5, Virgil M. Brand, Chicago; 6, Mr. Earle, Philadelphia; 7, Andrew C. Zabriskie, New York; 8, De Witt Smith, Lee, Mass.; 9, George W. Rice, Detroit, Mich.; 10, John A. Beck, Allegheny, Penn.; 11, W. W. Kaufman, Marquette, Mich.; 12, C. W. Cowell, Denver, Colo.; 13, John A. Jenks, Philadelphia, Penn. The finest specimen is in the collection of Virgil M. Brand, which he obtained at the sale of the coins of Augustus Humbert in Philadelphia. This is a beautiful proof. A perfect proof was disposed of at the Zabriskie sale. H. O. Granberg owns a proof specimen also, making the thirteenth, as Mr. Smith was mistaken in thinking that there was an example in the Mint cabinet.

The firm of Kellogg & Co. is credited with having struck \$6,000,000 worth of Twenty Dollar pieces during its operations, a large consignment of which was lost by the sinking of a steamer in the Pacific on its way from San Francisco to New York. The dies for the Twenty and the Fifty Dollar pieces are said to be still in existence.

The firm of Kellogg & Humbert was dissolved in 1860, and Mr. Kellogg became associated with J. H. Stearns and John Heuston, Jr., as Kellogg, Heuston & Co., who carried on an assaying business at 416 Montgomery Street. This firm was dissolved in 1866, and merged into the Selby Lead and Silver Smelting Company, which is still doing business. Mr. Kellogg died on April 21, 1886.

1854.

52—*Twenty Dollars.* *Obverse*, Head of Liberty to left, surrounded by thirteen stars. At the bottom is the date, 1854. On the coronet, KELLOGG & CO. in small letters. *Reverse*, A close imitation of the regular United States Double Eagle. The talon of the eagle clasps three short arrows.

53—*Twenty Dollars.* *Obverse*, Similar to 52, but the name KELLOGG & CO. in larger letters. *Reverse*, Similar to 52, but the arrows in the eagle's talon are much longer and extend almost to the scroll.

1855.

54—*Fifty Dollars.* *Obverse*, Head of Liberty, surrounded by thirteen stars. On the coronet KELLOGG & CO. Below is the date, 1855. On the truncation of the bust of Liberty, in small letters, R. GRUNER, for Ferdinand Gruner, a well-known die cutter of San Francisco. *Reverse*, An eagle similar to that on the octagonal Fifty Dollar piece, grasping in its right talon a United States shield and three arrows, while in the beak is held a long flowing ribbon without inscription. Above the eagle upon the folds of a long label is 1309 GRS 887 THOUS. Around the border SAN FRANCISCO CALIFORNIA FIFTY DOLLS. The edge is reeded.

This represents one of the handsomest pieces of die-cutting in the entire California series. No information concerning this Kellogg Fifty Dollar piece seems to be obtainable. It is quite certain, however, that it was issued about the same time as the Wass, Molitor & Co. piece of the same value, and like the latter, owes its origin to the demand of the San Francisco merchants for a gold piece of large denomination for quick counting purposes.

55—*Twenty Dollars.* *Obverse*, The usual Liberty head, surrounded by thirteen stars, KELLOGG & CO. on coronet, with 1855 below the bust. *Reverse*, Similar to 52.

56—*Twenty Dollars.* *Obverse*, Similar to 55, but the eagle on the reverse grasps long arrows, as on 53.

 ADDITIONAL NOTES.

The following additional information regarding several of the important mints has come to our knowledge since the previous pages were printed.

Until late in December, 1911, the existence of a Five Dollar coin of the Ormsby mint was unknown. While a letter to the "San Jose Pioneer" of May 5, 1877,¹ said that J. S. Ormsby & Co. had struck both Five and

Ten Dollar pieces, we were very much inclined to doubt its statement that the smaller denomination had been coined. However, such a piece has now come to light, and was purchased by the writer, in conjunction with J. W. Scott of New York City. A reproduction of this is shown on one of the plates herewith.

32A — *Five Dollars.* Obverse, J. S. O. in the centre of the field. Around the border UNITED STATES OF AMERICA. CAL. Reverse, 5 DOLLS in the centre of the field. Around the border twenty stars. Plain edge.

This piece had been in the possession of Jacob B. Moore, Jr., since 1849. He had been employed by his father Jacob B. Moore, Sr., Postmaster of San Francisco, as an assistant in that year. Mr. Moore's brother, George H. Moore, was formerly Librarian of the New York Historical Society. It will be observed that the punches used in making the dies for the Ten Dollar Ormsby piece were also used in making this. The Ten Dollar piece shows thirty-one stars around the border (California having been the thirty-first State admitted to the Union) while the Five shows only twenty. The latter fact has no significance, as the limited space would permit no more to be added. So far as can be learned, the Five Dollar piece is unique. It is in splendid condition, and does not appear to have seen much circulation.

The firm of Ormsby & Co. was composed of Dr. J. S. and Major William M. Ormsby. Their assay office and mint was located on K Street, Sacramento, just below the site of the Golden Eagle. Dr. Ormsby was a member of the California Legislature in 1858. Major Ormsby was one of the Nevada pioneers, and owned the third house built in the Eagle Valley, on the site of what is now Carson City. He was prominent in early Nevada affairs, and one of the prime movers in the organization of a Territorial government. Identified with him in Nevada was O. H. Pierson, another California pioneer, who had been a clerk in the Ormsby mint at Sacramento. During the Indian troubles in 1860, Major Ormsby, with a force of 105 men, had a fight with a band of Pah Ute Indians, under the leadership of Chiquito Winnemucca (Black Rock Tom, as he was known) near Pyramid Lake, the result of which was a disastrous defeat of the white men. Major Ormsby and about sixty others were killed.

In the "New York Herald" of May 11, 1849, is a full list of California companies at St. Joseph, Mo., April 14, ready to start on the long journey over the plains and mountains. Among these were "Dr. J. S. Ormsby, L. P. Ormsby, of Peru; Major William Ormsby and J. K. Trumbull, of Kentucky; A. McLain, J. Moats, J. Shutt, M. L. Detter, J. McManus, and Samuel Stoufer, of Westmoreland, Pa., ready to move, provided with four wagons, six mules to each; necessary provisions, etc." This item gives an idea of about the time the members of the firm left for the gold diggings.

Regarding the origin of the Massachusetts and California Company, the "New York Tribune" of January 23, 1849, stated: "In Northampton (Mass.) Rev. F. P. Tracy is the agent of a company who have raised \$6,000, and are soon to leave." In the same paper, February 3, 1849, we find that on January 26 the brig Mary Wilder cleared for the Gold Regions with the Massachusetts and California Mining and Trading Company. In another issue of the paper, giving a tabulated statement of the companies that had been organized to go to California, the Massachusetts and California Trading Company was mentioned as having a membership of 150. In the March 3 issue of the "Tribune" the following very valuable and interesting information is given, which explains clearly the origin of this Company and supplies certain knowledge which those devoted to the pioneer gold series have vainly sought for many years, the only clue previously found being the item in the *Journal* for January, 1898 (p. 91), as already mentioned:

The Massachusetts and California Company, formed in Northampton, Mass., which originally contemplated a capital of only \$6,000, has increased it to \$50,000. Only a quarter of the amount, however, is to be paid in at the outset. Josiah Hayden of Haydensville is President of the Company, and S. S. Wells of Haydensville, Miles G. Moies, and others, Directors. Rev. F. P. Tracy goes out to California as its active agent. It is the intention of the Company to establish a private mint at California, and, with the approbation of the Government, to make coins of the same denominations of the coins of the United States, and of equal, if not a little higher, value. Mr. William H. Hayden goes out as assayer, having qualified himself for the purpose by a series of studies under Prof. Silliman, and by all the information that could be obtained at the United States Mint. Mr. Hayden is a graduate of Yale College, and a son of the President of the Company. The machinery will coin about \$10,000 a day. It is the intention of the Company to purchase gold-dust, at the current prices, and transform it into coin for circulation. Should the Government establish a Mint there, it will be worth its denominational value, or more, at the Mint. The agent and those who accompany him will go by one of the land routes.

We add some further information regarding the firm of "Norris, Grieg & Norris," mentioned above. It would seem that the name of the middle member of the firm was "Gregg," and not "Grigg" or "Grieg" as has been stated. A thorough search of the California papers failed to mention this Company, but the advertisement as given below in a book published in New York in 1849, explains the origin of the firm:

NORRIS, GREGG & NORRIS, Manufacturers and Dealers in Wrought Iron Pipes, and Fittings of all kinds, for Steam, Water, Gas, &c., &c. No. 62 Gold Street (Between Beekman and Fulton Streets, New York). Mills and Public Buildings heated by steam. Tubular Boilers of various sizes. Thos. H. Norris, Charles Gregg, Hiram A. Norris.

The New York Directory of 1849 gives Thomas H. Norris, civil engineer, 62 Gold Street, house 268 Jay Street, Brooklyn; Hiram A. Norris, civil engineer, 62 Gold Street, house 310 Gold Street, Brooklyn, and Charles Gregg, engineer, 62 Gold Street, house 209 Pearl Street, Brooklyn. Up to the present no information dealing with this firm's connection with private coinage has been found, although the sailing list of a vessel bound for California in 1849 mentions the name of H. A. Norris.

In the "Tribune" of February 15, 1849, we find an account of the sailing of John L. Moffat for California; the reference to "a sort of mint" it contains, proves that the issue of private coins by him in California was contemplated before he left New York, and was not due to local conditions upon his arrival there, as had been supposed:

The good bark Guilford sails to-day from the foot of Wall Street. Whatever success may attend the various adventurers, associated or individual, they will require a certain medium of circulation, or a fixed standard for their gold-dust. This end may be obtained through the operations of Messrs. Moffat & Co., who go out in the Guilford, with proper assistants, and most complete machinery and apparatus, to supply the want of Californians; in other words, to establish a sort of mint, to receive the gold-dust, smelt and assay it, and by their stamp to give it a currency and value, which must, in the absence of a Government character, be received by the merchants and consumers. Mr. John L. Moffat, known as the standard assayer in this city for many years, carries with him testimonials of our most eminent merchants, bankers, and bullion dealers, including a certificate of the strongest character from Messrs. Beebe, Ludlow & Co., the heaviest bullion dealers in the United States; the most eminent gold dealers, in the city, together with Hon. R. J. Walker, Secretary of the Treasury, have indorsed the circular of Messrs. Moffat & Co. They have our best wishes for their success.

JOHN LITTLE MOFFAT.

For the following biographic sketch of Mr. Moffat we are indebted to the kindness of R. Burnham Moffat of New York City, a grandson, who in 1909 prepared and privately printed the "Moffat Genealogies.

John Little Moffat at the age of twenty-three years married Hannah Curtis, daughter of Reuben Curtis, of Danbury, Conn. Fourteen children were born to them, but only five survived infancy, and but three of those five married and had issue. Mr. Moffat lived in New York City from his marriage until about the middle of the 'thirties, when he moved to Northern Georgia, in the valley of the Nacoochie, where he had purchased some gold mines which he had begun to operate. He had previously owned a gold mine in North Carolina, and on three separate occasions during his life made, and as many times lost, what in those days was deemed a very substantial fortune. In his

youth he learned the trade of a silversmith, and throughout his life found satisfaction in the thought that he "had a trade." Lack of persistence seems to have been the defect in what otherwise was a character of high purpose, charm, and manly loveliness. He was identified in turn with the Presbyterian, Episcopalian, Dutch Reformed, Quaker, Methodist, and Swedenborgian faiths, but found the satisfaction he sought in none of them — except possibly in the last, with the teachings of which he became familiar during the closing years of his life.

When the "gold fever" fell upon the country, following the discovery of gold in California, it found Mr. Moffat at the bottom of one of his waves of financial success, and he joined the throng of "forty-niners." . . . While in California he became Assayer for the United States Government, and during the few years of his stay there established a reputation for unswerving integrity in the assaying of gold, which survived, for many years, his return to the East. He died in Brooklyn, N. Y., at the home of his son, Dr. Reuben Curtis Moffat, on June 19, 1865, at the age of seventy-seven years, idolized by his daughter and surviving sons.

Mr. Moffat was born at Goshen, N. Y., February 12, 1788, and was seventy-three years of age when the photograph (reproduced in the plate) was taken. For permission to use this we wish to thank Arthur Moffat Allen, a grandson of Mr. Moffat. It is said to be the only one extant.

We are now able to show positively that Theodore Dubosq, senior member of the firm of Dubosq & Co., came from Philadelphia, and before he left for the gold fields of California had contemplated the striking of private coins. The "Philadelphia Evening Bulletin" of January 18, 1849, records the sailing of the *Gray Eagle*, and gives its passenger list, in which appear the names of Theodore Dubosq, Sr., Theodore Dubosq, Jr., and Henry A. Dubosq. "Mr. Theodore Dubosq, jeweler, North Second Street, we understand, takes out with him the machinery for melting and coining gold, and stamping it with a private mark, so as to establish a currency which will afford the greater convenience and facility for dealing in the raw material."

Regarding the Cincinnati Mining and Trading Company, the "Cincinnati Gazette" of March 10, 1849, states that the steamer *Bay State*, Capt. Collier, left Cincinnati on March 10 with the Cincinnati Company aboard. (For this information we are indebted to Henry Clay Ezekiel of Cincinnati.) The "New York Tribune" of March 18, 1849, states that on March 10 the Company started overland by way of St. Louis. The names of the members were given. In the same paper of July 7, is printed a letter, dated May 17, written to a Cincinnati newspaper, by a member of an overland company, at Fort Childs, 300 miles west of Independence, Mo. From the date and con-

tents there can be little doubt that this was the Cincinnati Company, although no mention is made of its name. The letter is particularly important as it shows that this Company really did take its coining apparatus with it :

On the 10th we arrived at the junction of St. Joseph's Road, and in the course of the morning saw so many wagons that we thought we must lighten our loads and get in advance of the tide of emigration, or our mules and oxen must suffer in consequence of short feed ; therefore about noon we stopped and held a meeting, and passed a resolution appointing a committee to examine all the wagons and throw out and abandon everything that was not absolutely necessary. Accordingly we left behind the wagon that we purchased for carrying corn, which cost \$210; blacksmith tools, consisting of anvil, forge, sledge-hammers, etc.; about 200 mule shoes, several extra axle-trees, and came very near leaving the coining apparatus, most of the company being in favor of so doing, it being very heavy. We also changed the sugar, rice, etc., from boxes into bags. While we were engaged in this business a train of over 50 wagons passed. They reported that they had passed between 600 and 700 wagons; some they left at St. Joseph's, and that a great many of them had to throw away a part of their loading, almost every one loading too heavy. One team they passed had abandoned 1200 lbs. of bacon, among other things. So many trains have started that fears are entertained that they cannot all get through, as there will not be grass enough for the animals. This and the anxiety to get to the gold diggings as soon as possible, are the causes of property being abandoned. Among the wagons that passed us was one train from Georgia with a carriage or hack containing a man and his wife; that train also had several negroes with them. Our wagons are made too heavy and strong. There are none like them. Other trains have just such as come out of market at Cincinnati, many of them poorer. We might have saved \$600 and had wagons more suited for the trip.

There are two companies of regulars, mounted riflemen, stationed here for the protection of the encampments. I stopped at the store and found it full, there being two or three trains encamped close by. Among them is one of thirty wagons from Alton, Ill. Almost every article can be had at an advance of from 200 to 400 per cent. over prices in the United States. The sale of liquor was yesterday prohibited by an order from the officer at the Fort. One man told me that he bought, previous to the order being given, fifteen gallons at 30 cents, and had since been offered \$8 per gallon. The houses, consisting of about a dozen, are built of turf or sod cut from the prairies, having a frame of wood inside, wood being very scarce—the nearest on this side of the Platte being thirty miles. We have been all the forenoon picking up what wood we cooked our dinner with, finding it stick and chip at a time, from old encampments.

We first came in sight of the Platte yesterday, and struck it at the head of the "Grande Island," as it is called, being an island ninety miles long. Near us are encamped a wagon and six men, Mormons, just from California. I saw a specimen of the 'dust'; it is in scales, about the size of a large pin's head hammered out. According to their account, there is enough for all who go; but, like some other places, it takes hard work to procure it. The specimen I saw weighed just ten dollars, pure gold—this was all they had convenient. I asked them how much they had made. They said they had dug until they were satisfied, and had all they wanted, which must be a large amount, if they are as greedy as some of us. One of them told me the most he ever made in the shortest time was \$750 in half a day; he said they averaged \$150 per day apiece.

GEORGE FERDINAND ALBRECHT KÜNER.

The designing of a coin is always an important part of its history, and it seems but appropriate that in connection with the account of the California private coinage, especial mention should be made of the engraver who designed and cut the dies for a majority of the private mints which did business in California from 1849 up to and including 1855, the last year of such issues.

George Ferdinand Albrecht Küner, more familiarly known as Albert Küner, for he dropped the first two names upon his arrival in San Francisco,— was born at Lindau, Bavaria, October 9, 1819, learning there the business of a gold and silversmith. When he first came to the United States, in the latter part of 1848, he intended to follow the occupation of cameo cutting, in which he was particularly skillful; but, like many others, he was attracted to California by the marvelous gold discoveries, and arrived in San Francisco July 16, 1849.

There being a great need for a die-cutter and seal engraver, Mr. Küner entered the employ of Moffat & Co., who were then smelting and assaying gold, and engraved the dies for the first Ten Dollar piece of private manufacture to be issued on the coast, which bore the stamp of Moffat & Co. Among other dies he cut those for the seal of California, all the medals awarded by the Mechanics' Institute, and hundreds of others issued along the Pacific Coast for various purposes from 1849 until within a few years of his death.

He started in business for himself in October, 1849, on Clay Street, next moving to Kearny, between Jackson and Pacific; but, being burned out in May, 1850, he returned to Clay Street. He was again burned out in May, 1851, and then went to Dr. Mitthall's building, on Montgomery, near California. In 1852 he moved to Washington Street, using a part of Braverman & Levy's store, where he remained fifteen years. He then removed to the building occupied by Wores, the latter, where he continued seventeen years. In 1884 he moved to 704 Montgomery Street, where he remained until 1891.

He was painstaking and methodical, and had a carefully prepared record of each specimen of his handicraft — impressions in wax, dies, etc., nearly all of which, with his papers, were destroyed in the great fire when his residence at the corner of Golden Gate Avenue and Gough Street was burned. However, a record of many of the coins for which he cut the dies remains in his personal copy of the book issued by Eckfeldt & Dubois in 1851. He made a memorandum in his own handwriting over each illustration of the various California coins engraved by him. Guided by these notes we find that he made the dies of the N. G. & N. Five Dollar piece, the Five and Ten Dollars

of Moffat & Co., dated 1849 and 1850; the Schultz & Co. Five Dollars of 1851; the Dunbar & Co. Five Dollars dated 1851; the Baldwin Five, Ten, and Twenty Dollars of 1850 and 1851; and the Fifty Dollar octagonal, with the denomination reading, "Fifty Dolls." and the name on the obverse around the border.

The illustrations of the Miners' Bank Ten Dollars, the Pacific Company Five and Ten, the Massachusetts and California Five, the Templeton Reid Ten and Twenty-five, the Cincinnati Mining and Trading Company Five and Ten, the "J. S. O." Ten, and the Dubosq & Co. Five and Ten Dollar coins were not marked, and therefore were not his work.

He also engraved the dies for all of the coins issued by Wass, Molitor & Co., as well as those for the Deseret Assay Office Five Dollar piece of Utah, dated 1860. Robert Schaezlein, his close friend, says that after Mr. Küner received the commission to cut the dies for this Mormon piece he showed him the first impression, struck before the date and inscription had been added. This was the identical gold pattern piece, presented to Brigham Young, which is said to have hung on the watch chain of the Mormon leader as a charm. Upon Mr. Young's death the watch, chain and pattern piece were sold for \$300, and are said to be now in the possession of the Mormon Church at St. Lake City. We learn that this pattern was the one that showed mountains back of the reclining lion, and which were omitted from the regular Deseret Assay Office Five Dollar piece issued for circulation.

One of his daughters has wax impressions of some of his pieces, among which are the W. M. & Co. Five of 1852, the Schultz & Co. Five of 1851, the Baldwin Twenty of 1851, and a reverse showing an eagle and the inscription, "Pure California Gold." One of the cards bearing a wax impression contained this memorandum:

Impression taken from the die while it was being engraved in the month of July, 1849, by A. Küner, engraver with Moffat & Co., at the southeast corner of Montgomery and Jackson Streets.

This was the Ten Dollar piece of Moffat & Co. of 1849, but it had neither date nor inscription, and was the first private coin of the denomination to be issued in the extensive California series.

He was paid \$600 for the die for the first State seal of California, and in 1883, when it became necessary to renew it, journeyed to Sacramento and engraved the new seal, for which he received \$300. He stated to Mr. Schaezlein that he received as much as \$500 for a pair of coin dies in the pioneer days. A wax impression of the first seal was in his possession for many years, but was destroyed in the fire of 1906. There was a great

scarcity of metal in San Francisco in 1849, and when he received the commission to engrave the seal he found it necessary to go around the neighborhood and pick up scraps of metal from which to make the first die.

In 1862, when the Government of British Columbia contemplated an issue of local gold, the order to prepare the dies was given to him and he cut those from which were struck the excessively rare Ten and Twenty Dollar pieces, dated 1862 and bearing the name of "British Columbia," of which but few sets are now known to be in existence. One of these is in the British Museum, and another brought a large sum at the Montague sale some years ago.

Before turning over the dies to the Government of British Columbia, he struck a few trial-pieces in silver on a coining press which Lemme Brothers had brought from Germany. The existence of these trial-pieces seems to have been unknown until recently, following the investigations of the author in California.

It has been stated by one of his biographers that he engraved the dies for the coins of Broderick & Kohler—supposed to have been the Pacific Company pieces; but this is certainly an error, for in his copy of Eckfeldt & Dubois's book, as stated above, he made a careful memorandum over each of the coins engraved by him, and the spaces over the Pacific Company coins were left blank. He also wrote his name opposite each coin in the Index of California coins in another part of the same book, and in this again he omitted any mention of the coins of the Pacific Company.

A. Reimers of San Francisco, another warm friend, states that Mr. Küner told him that he had engraved the dies for the N. G. & N. Five Dollar piece, and that these men were Stockton merchants, who expected to use the coins at the mines in the lower part of the State; and we find that he made a memorandum in the book cited to that effect, but there must be some error, or this firm issued two different designs, judging by a paragraph taken from the "Alta California" of May 31, 1849, which said that a gold coin of Norris, Grieg & Norris, of the usual design, had just come to hand; and that, although it bore the name "San Francisco," it was nevertheless struck at the instance of the above-named firm, who were located at Benicia. This date, which must have been accurate, is several weeks before his arrival at San Francisco, on July 16, 1849. Of course it is possible that he cut the N. G. & N. dies before he got to that city.

Mr. Küner painted in water colors, and during his leisure moments executed many exquisite examples of the engraver's art in different materials, principally mother-of-pearl, which he presented to his wife and children from time to time. All of these works, of which none was ever made on a com-

mission, were of original conception and of the most delicate and artistic workmanship, and are still carefully preserved by various members of his family.

He was a great lover of animals, and especially skillful in depicting them. An example of the magic touch of the artist is shown by his wife in the shape of a napkin ring which he carved from a bone picked up at random. In a mass of the most delicate carving is traced a continuous scene of a grizzly bear hunt in the mountains by two hunters; their start in the morning, their fight with the bear, the evening camp, the dead bear at one side, the guns resting against a tree, and the hunters rehearsing the day's exploit, are gracefully given.

He engraved all the seals for Wells, Fargo & Co., from 1852, the first year of the firm's existence, until the day of his death. They always turned their work over to him, and, though retired from all other business, he took care of this one commission.

He died on January 23, 1906, at the age of eighty-six years, being survived by a wife, three daughters, and one son.

EDGAR H. ADAMS.

(To be continued.)

TAFT-DIAZ MEDALS.

The American Numismatic Society:—

In the *American Journal of Numismatics*, published last September, I noticed an account of "A Taft-Diaz Medal." As I am a collector of medals relating to Yale University and its graduates (President Taft graduated there in 1878), I wrote to the editor, in regard to the matter, and he called my attention to the fact that these medals purported to be struck by "Schwaab of Milwaukee." I got in touch with that firm, and found the medals had been issued in two forms in respect to their reverses, one being that described in the *Journal*, with a Texas star in a wreath of laurel, and the other with the American eagle, shield and flags. I also learned that the stock on hand had been exhausted, but they still had the dies, and I had interest enough in the matter to have them reset the dies and strike off some additional medals, so that I could present copies to your Society and to Yale University, in addition to those I retained. Although the execution is crude, the fact that the medal was considered worthy of mention in the *Journal*, made me think you would like to have copies, and there is also an historical interest in the matter, particularly in view of what has happened to President Diaz since the occasion commemorated. Please find herewith copies of the two forms of medals above referred to, which I am pleased to present to the Society for its collection.

Yours very truly,

SAMUEL R. BETTS.

New York, December 22, 1911.






REATTRIBUTION OF CERTAIN TETRADRACHMS OF ALEXANDER THE GREAT.

FIFTH PAPER.

















(Continued from Vol. XLV, p. 200.)

UNCERTAIN MINTS IN MACEDONIA, THRACE, AND ASIA MINOR.

BEGINNING with type 52 it has been found expedient to insert in the tables two extra columns, the one to indicate the presence of the title $\text{BA}\Sigma\text{IA}\text{E}\Omega\text{Z}$, the other to describe the relationship existing between obverse and reverse dies. In the most recent numismatic works considerable attention is being paid to this point.¹ It often proves an aid in the correct dating and even attribution of coins concerning which there has been more or less doubt. By far the greater number of the coins belonging to the types present in the Demanhur find were struck from "loose" dies — that is, no care or system was used in placing the obverse and reverse dies in any particular relation to each other during the process of striking. In some of the eastern mints, however, the dies seem to have been adjusted *by hand*. That is, the dies, when struck, were placed in some definite relation to each other, either II , or II , or I , but were not held rigidly in position. In this case, if we compare two or more coins from identical obverse and reverse dies, we shall find the dies showing one of the above-mentioned relationships, but varying slightly to right or left for each coin. This system was gradually finding favor and spreading to other mints about the time of the burial of our hoard. A very few of our coins are from "fixed" — that is, hinged dies. These dies, being thus rigidly held, do not show any variation in their relative positions.

Type No.	Symbol.	Inscr.	Refer.	Obv. dies.	Rev. dies.	Position of dies.	Specimens in find.	Plate.
52	ATHLETE		—	3	6	Loose	7	XVI, 1
53	SUPPLIANT		M. 637	2	2	"	3	XVI, 2
54			M. 836			"	1	XVI, 3
55	INSECT ON ROSE		M. 856			"	2	XVI, 4
56			M. 762			"	1	XVI, 5
57			M. 197			"	3	XVI, 6
58	HELMET, $\text{A}\Sigma$		M. 1472			"	3	XVI, 7
59	EAR OF WHEAT		—			"	1	XVI, 8
60	HEAD OF GOAT		IP. ¹ 71			"	1	XVI, 9
61	SHIELD	B	M. 223			"	1	XVI, 10
62	 A	B	M. 859			"	1	XVI, 11
63			M. 838			"	1	XVI, 12
64	BUCRANIUM		var. M. 97			"	1	XVII, 1

¹ G. Macdonald: "Fixed and Loose Dies in Coinage," *Corolla Numismatica*, 1906.

Type No.	Symbol.	Inscr.	Refer.	Obv. dies.	Rev. dies.	Position of dies.	Specimens in find.	Plate.
65	TRIDENT, 		—			Loose	1	XVII, 2
66	Λ, TORCH, 		M. 37			"	2	XVII, 3
67	KERYKEION		var. M. 207			"	1	XVII, 4
68	VINE BRANCH		—			"	1	XVII, 5
69	VINE BRANCH	B	—			"	2	XVII, 6
70	ARTEMIS W. TORCHES		—			"	1	XVII, 7
71	ARTEMIS W. TORCHES, 		M. 397	14	23	"	27	XVII, 8, 9, 10
72			—			"	1	XVII, 11
73	HOPLITE,  or 		IP. ³ 5			"	4	XVII, 12
74			IP. ¹ 86			"	1	XVIII, 1
75	 BEE		M. 512			"	3	XVIII, 2
76	 ROSE		—			"	1	XVIII, 3
77	 SPRIG	B	—			"	2	XVIII, 4
78	FULMEN	B	—			"	1	XVIII, 5
79	KERYKEION		var. M. 207			"	2	XVIII, 6
80			IP. ¹ 83			"	2	XVIII, 7
81		B	—			"	1	XVIII, 8
82	EAR OF WHEAT		IP. ¹ 151	4	9	Fixed	10	XVIII, 9
83	 		var. M. 1599			Adjusted	3	XVIII, 10
84			IP. ¹ 157			"	4	XVIII, 11
85			IP. ¹ 158			"	2	XVIII, 12
							98	

Total brought forward, 1001

The coins which have been thus vaguely attributed above to the districts Macedonia, Thrace, and Asia Minor, were, with one or two exceptions, very scantily represented in the Demanhur Hoard. Müller's attribution of these coins to separate cities is highly conjectural; but that their mints once lay within the boundaries given is indicated by their style. Style has also influenced their actual grouping; but as style without other evidences to back it, is a very uncertain reed to lean upon, nothing definite is claimed, or even attempted, in the present case.

Only in one or two instances where enough specimens to warrant conclusions have been inspected, has there been any attempt to give the number of different obverse and reverse dies.

Types 54, 55, and 56 are similar enough to be assigned to one mint. The same may be said of types 57 and 58; also of types 59, 60, and 61, — 59 and 60, moreover, have their obverses from the same die. Müller's attribution to Perinthus in Thrace for type 71 (and 70) has a greater claim to consideration than any of the rest, though even here there is considerable doubt. Types 74, 75, 76, and 77 are evidently from one mint, as is definitely proved by identical obverse dies. If in this case the small symbols (*Bee, Rose, Sprig*)

under the throne are magistrates' symbols — as seems more than likely — the monogram in the field *may* indicate the mint. If so, it is very tempting to resolve it into "ΑΜΦΙΠΟΛΙΞ." Types 82, 83, 84, and 85 are among the most recent in the find, their coins being invariably in superb condition. This is likewise the case with types 62, 64, 65, 66, and a portion of type 71. The remainder cover the interval between the hoard's burial and the commencement of Alexander's reign.

In weight the specimens in mint state, belonging to the present group of types, vary somewhat more than similar coins of the Pella mint. The weights run anywhere from 17.05 grammes for a coin of type 58, to 17.35 grammes for a coin of type 65. The majority, however, average between 17.10 and 17.15 grammes per coin — a slightly lower level than was found in the Pella issues.

EDWARD T. NEWELL.

[To be continued.]

THE MEDALS, JETONS, AND TOKENS ILLUSTRATIVE OF THE SCIENCE OF MEDICINE.

(Continued from Vol. XLV, p. 202.)

XII. AUSTRIA (continued). B. 3. *Medical Societies.* (Continued.)

Oedenburg (Sopron). VIIIth Congress of Hungarian Physicians, 1847.

2730. *Obverse.* Hygeia with wreath and Aesculapius with staff, clasping hands over the city arms. Beneath base, to right: I. D. BOEHM F.

Reverse. Wreath of fruit and grain, with Hungarian crowned shield at lower junction. Within: SZABAD KIRALYI | SOPRON VAROSA | A MAGYAR ORVOSOK | ES TERMESZET VIZSGALOK | VIII · NAGY GYULESERE | 1847 AUGUSTUS 11-17 (The free royal city of Sopron to the Hungarian Physicians and Naturalists at their VIIIth General Meeting, 1847.)

Silver, bronze. 26. 41mm. Duisburg Cat., p. 72, No. 882. In the Government, Boston, and University of Pa. Collections.

2731. *Obverse.* Military bust, to left. Beneath: I. D. BOEHM F. Inscription: GALANTHAI HERCZEG ESTERHAZY PAL (Paul of Gelantha, Prince Esterhazy.)¹

Reverse. A chateau. Inscription: A MAGY. ORV. ES TERM. VIZSG. VIII DIK NAGY-GYULESE | ELNOKENEK HALAEMLEKUL (The VIIIth General Meeting of Hungarian Physicians and Naturalists, to their President, in remembrance.) Exergue: 1847 AUG. 17

Silver, bronze. 26. 41mm. In the Government and Boston collections.

Pécs. See Fünfkirchen.

Pozsony. See Presburg.

¹ Esterhazy was the one of note in the 1848 troubles. He was a naturalist and this convention was held in his palace.

Prague. Pharmaceutical Centre of Bohemia.

2732. *Obverse*. Within circle, the Bohemian lion upon an oval shield. At sides, two pharmacists in antiquated dress. Inscription: GREMIUM PHARMACEUTICUM REGNI BOHEMIAE

Reverse. Blank.

Brass. 22. 35mm. Donebauer, p. 586, No. 5073. In the Government collection.

Do. XVth Convention of German Physicians and Naturalists, 1837.

2733. *Obverse*. The Rath house. Beneath, to left: J. DE LERCH; to right: FEC. PRAGAE Exergue: CURIA.

Reverse. A serpent swallowing itself. Within: PRAGA | CONSORTII | MEMOR Inscription: CONCIONI · XV · NATUR · SCRUT · ET · MEDICI GERMANIAE · MDCCCXXXVII (rosette).

Silver, bronze. 28. 45mm. Kluyskens Cat., p. 217, No. 6 and p. 218, No. 6; Duisburg, p. 238, No. 8; *Ibid.*, Cat., p. 72, No. 826; Boehm. Priv. Münzen, p. 813, No. 950; Schulman, Arnheim Cat., 1899, p. 106, No. 95. In the Government and Boston collections.

Do. Congress of Deaf Mutes, 1881.

2734. *Obverse*. Within rectangular space, the city. Beneath, in rectangular cartouche; 1881 Inscription: V(ON). TAUBSTUMMEN — CONGRESS IN PRAG.

Reverse. Blank.

Bronze. 26. 41mm. Donebauer, p. 580, No. 5007.

Do. IId International Pharmaceutical Exposition, 1896.

2735. *Obverse*. Hygeia. Inscription: INTERNATIONALE PHARMACEUTISCHE AUSSTELLUNG PRAG 1896

Reverse. Buildings, with two shields. Legend: HONORI ET MERITO

Silver, bronze. 33. 53mm. Communicated by Mr. J. D. Stiefel of Offenbach A/M., through Schering and Glatz of New York.

Presburg (Pozsony). XIth Congress of Hungarian Physicians, 1865.

2736. *Obverse*. Ornate well, with owl in front. At left, Hygeia seated, with drinking serpent; at right, Science with mirror. Beneath: W. SEIDAN INV. & FEC. Legend: SCIENTIA MOTU CLARIOR

Reverse. Within quadrate circle: A · | MAGYAR ORVOSOK ES | TERMESZET VISZGALOK | XI GYULESENEK | 1865 Above, a crown; below, the city arms. Inscription: POZSONY SZABAD KIRALYI VAROSA

Silver, bronze. 29. 45mm. Franz Josef Medaillen, *Club der M. und M. Freunden*, 1340. In the Government and Boston collections.

Raab (Gyor). XVIIth Do. Do. 1874.

2737. *Obverse*. Within circle, crowned armorial shield between crossed palm and oak branches. Inscription: SZABAD KIRALYI GYOR VAROSA | * 1874 *

Reverse. Mercury with winged cap and caduceus has right arm around neck of Minerva. At left, an owl, with locomotive and car upon a viaduct. At right, an anchor, with sacks, bales, and a chest inscribed 1848 In background, a factory and vessels. Beneath base, at right: SEIDAN Inscription: A MAGYAR ORVOSOK ES — TERMESZ — ET VISZGALOK XVII NAGYGYULESE EMLEKEUL

Bronze. 27. 42mm. *Ibid.*, 1398. In the Boston collection.

Rimaszombat. Do. Do. 1866.

2738. *Obverse*. Within three scrolls, a shield with spread eagle to left. Inscription: RIMASZOMBAT A MAGYAR ORVOSOK ES TERMESZET VISZGALOKNAK *

Reverse. In centre, mailed female (Hungary) erect, with mural crown, sword, and armorial shield. At left, an owl, bust, and two sheaves of grain. At right, a cogwheel, anchor, bale, and smelting furnace. To left, SEIDAN Exergue: 1866

Silver, bronze. 24. 40mm. In the Boston collection.

Salzburg. LXXXIst Convention Physicians and Naturalists, 1909.

2739. *Obverse.* Bust, to right. Beneath, family arms. At sides, in German script: THEOPHRASTUS PARACELSUS | * 1541 | * 1493

Reverse. The western fortress of Salzburg. 19—09 In lower corner, in Gothic character, arms of the city. Inscription in German script: 81 NATUR- | FORSCHER: | TAG ZU SALZ | -BURG.

German silver. 14. 28mm. *Monats-bl. der Num. Ges. in Wien*, April, 1910, p. 163; Pachinger, *ibid.*, April, 1911, p. 292, No. 5.

Sopron. See Oedenburg.

Steinamanger (Szombathely). XXIst Congress of Hungarian Physicians, 1880.

2740. *Obverse.* Within circle, cartouche with pendants. Upon it, fortified tower, etc. Inscription: SZOMBATHELY REND. TAN. VAROS | 1880 (between rosettes).

Reverse. Building. Inscription: A MAGYAR ORVOSOK ES TERMESZET VISZGALOK | XXI^{IK} NAGYGYULESE EMLEKEUL

Bronze. 28. 46mm. In the Boston collection.

Sziget. See Marmoros.

Szombathely. See Steinamanger.

Newport, R. I.

HORATIO R. STORER.

[To be continued.]

AN EXHIBITION OF "ORDERS."

A FEW months ago an exhibition was held in the rooms of the Museum of Decorative Arts, in Paris, under the somewhat singular name of an "*Exposition Rétrospective*" of the Legion of Honor, at which the various crosses, collars and decorations of that and other French Orders of Knighthood, including some which have ceased to exist, were displayed to numerous interested visitors. In commenting on this event, M. Adrien Blanchet remarks, in the last issue of the *Revue Numismatique*, that from an archaeological point of view there were many historical documents having reference to these Orders which escaped the notice of those in charge of the Exposition,—mentioning as a case in point the "Ordre du Camail." The large jewel of this Order is difficult to obtain, yet some of its miniature copies might have supplied the need.

Notwithstanding there were numerous duplicates shown, and a slight confusion in the arrangement, the "*Rétrospective*" was of unusual attractiveness, containing as it did, not crosses alone, but the beautiful collars of most of the French Orders, as well as a rich series of the decorations which have been bestowed at different times on many distinguished gentlemen of France. A

choice little volume, to which a catalogue of fifteen pages was appended, prepared by expert authorities, was issued, illustrated with twenty plates, two of them in colors. This brochure will certainly be valued by numismatists, for its accounts of ancient and modern Orders; of the schools and asylums of the Legion, of which there are numerous commemorative medals; for its description of official and ministerial medals, and its sketches of the Orders founded by Napoleon and his brothers. The close connection between numismatics and these decorations is evident, as may be seen in a study of this department in the cabinets of The American Numismatic Society, where are to be found some of the rarest and most interesting examples. M.

THE ORIGINS OF THE DRACHM AND OBOLUS.

BY M. JOSEPH DÉCHELETTE.

(Translated for the *Journal*.)

The remarkable discovery by Waldstein, in his excavation of the ruins of the Heraion at Argos in 1895, of the iron rod or spit money deposited there by Pheidon, and its subsequent rescue from destruction by Svoronos, was described in the *Journal* (XLIII: No. 4). The existence of similar rods or spits in museums and private collections in Western Europe, the true purpose of which has not been recognized, has led M. Joseph Déchelette to make a careful study of the subject, and his conclusions were printed at length, with illustrations, in a recent number of the *Revue Numismatique* (Paris, 1911: pp. 1-59). The following translation, though necessarily much condensed, gives the substance of his exhaustive research. Whether all his conclusions will be generally accepted by numismatists may be a question, especially his theory of the origin of "Charon's fee," with which the paper closes (that it was a substitute for the spit, in earlier times placed near the mouth of the dead), but his arguments that the bundles (drachms or handfuls) of spits (oboli), usually six in number, served as money before the invention of coinage properly so called, deserve consideration. — ED.

AMONG the various utensils which anciently served as a common measure or standard of value before the invention of coinage, properly so called, there is one mentioned by many writers — the roasting spit — the Greek name of which, ὀβελός, ὀβελίσκος, designated one of the smallest coins of the Hellenic monetary system, — the obolus. In some places these spits were used as a means of exchange as late as the Fourth century B. C., long after silver coins of the same value were in circulation. The obolus was the sixth of a drachm, and most authors, ancient and modern, have admitted that the drachm, as its name implies, was simply a *handful* of spits; that is, a bundle of six iron rods, — as many as could conveniently be grasped at once. Some have sought to trace the word to the Assyrian *daragmana*, found in cuneiform inscriptions, but Babelon has shown that this is really a transliteration of the Greek — δραχμή.¹

The spit, a long rod of bronze and later of iron, having one end pointed, possessed qualities which made it acceptable as a common measure of value at a period when men would otherwise have been obliged to use heavy and cumbersome articles for such purposes. In Homer's time, and no doubt earlier, it was one of the most common domestic

¹ By the same authority the Assyrian *aplus*, which signifies an obolus, is also a transcription from the Greek.

implements. Meats were boiled in caldrons, or roasted on spits, and we know that the caldron (λέβης) as well as the tripod (τρίπους) which supported it, belonged to what we may call "money utensils," being used for both purposes.¹ The spit was even more useful, since it was not only one of the chief accessories of the kitchen, but could be transformed into nails, bolts, boat-hooks, arrow-points, javelins, etc.

We know from a tradition mentioned by Aristotle, that Pheidon, in establishing his first silver coinage in Aegina, deposited in the temple of Hera at Argos ὀβελίσκοι, which his invention had retired from circulation. Yet his coins were unable to drive out entirely the primitive means of exchange, so familiar from established usage, however inconvenient were these long and heavy rods of iron, compared with the new money; and Plutarch says that Epaminondas was buried at the public expense, because at his death he did not have "even an iron obelisk."

The spit, historians tell us, was an acceptable means of exchange among the Byzantines and the Spartans, who also used for that purpose masses of iron called *pelanors*, shaped like a cake or loaf of bread. "These iron ingots," says Babelon, "πέλανορ, ὀβελίσκος, σιδηροῦν νόμισμα (*pelanors*, obelisks, iron money), which circulated in Sparta, were heavy bars weighing an Aeginetan mina — surviving witnesses of a metallic currency before the invention of coinage. Under the stern rule of the Laconian capital, their use was exclusive, and the citizens were forbidden, under pain of death, to possess any other money. But elsewhere in the Greek world and at Rome, these early monetary ingots long continued to circulate beside the regular coinage. They were called *φθοῖδες* (cakes), or ὀβελός, ὀβελίσκος (spits, pigs). The cake of metal is also mentioned in the accounts of the treasurers of the temple of Minerva at Athens, in the Fifth century B. C."²

Until very recently archaeology could give no satisfactory explanation of these traditions concerning spits, so many of which are preserved in European museums; their purpose was entirely unknown. But in 1895 a discovery worthy of the greatest publicity was made — Waldstein's find of a bundle of spits — in the excavations at the Heraion.³

With this and Babelon's "Origins" as a basis, M. Déchelette offers several novel and interesting conclusions: —

1. Monetary spits circulated not only among the Greeks, but among the Etruscans also, in whose territory bronze examples have been found, dating from about the Eighth century B. C.
2. Some centuries later they were used in Italy among the Senonian Gauls, who borrowed the custom from the Etruscans.
3. From Cisalpine Gaul their use extended into Transalpine Gaul and central Europe.
4. The spits used by the Etruscans and Celts were made up into bundles of six, seven and eight pieces — though rarely more than six — held together by a clasp; which seems to remove all uncertainty as to the origin of the word *drachm* (*i. e.*, handful).

¹ See Babelon, *Les Origines de la Monnaie considérées au point de vue économique et historique*. Paris, 1897, p. 72.

² Babelon, *Origines de la Monnaie*, p. 80.

³ Here our author quotes at length from Svoronos the account of this discovery, as printed in the *Journal*, XLIII: No. 4, to which the reader is referred. M.

Theodore Reinach, accepting Aristotle's account of the deposit, by Pheidon, and the fact that these utensils served as a primitive means of exchange, thinks it probable that Pheidon's object was really to preserve a standard of weight, *ne varietur*, and says, "The custom of making such deposits in temples is proved by numerous examples." — Ed.

The author next discusses the relative importance of the spit among the utensils of the fire-place, — andirons, fire-dogs, etc., of which it was the complement, at least from the time when men no longer used the stones which surrounded the primitive fire-places.

In Greece the evidence of this is very rare, but in Italy Etruscan burial places, graves and tombs afford ample testimony. It is well known that the Etruscans were fond of the pleasures of the table. The frescoes of the tombs at Orvieto and many other cities show us their banquets; the Romans ridiculed "the obese Etruscan," as Catullus (39: 11) says, and these tombs contained the same furnishings as the houses. Thus the dead found in their final resting-places the objects with which they had been familiar in life, and among them those of the kitchen were the most important. Dennis tells us that in a tomb at Volterra, discovered in 1738, there were such a quantity of bronze culinary articles that one might think he had exhumed an ancient Etruscan kitchen. We only need turn to an account of Tuscan tombs for an explanation of this mistake.

The author then describes many of these objects, exhumed in various places, some of which were supposed by their discoverers to have been used as candelabra, but which he shows could not possibly have been intended for that purpose. The so-called candelabra were *hastiers*, to use a medieval term, and were doubtless designed to hold the spits, which were frequently found with them, usually having a perforation for a pin at the end (flattened for that purpose), by which they could be fastened into bundles. The upper part of others was twisted, or bent into a loop. He gives several engravings of these spits, separately and in bundles, found in Etruria and now preserved in various museums, notably at Rouen and in the *Bibliothèque nationale*, at Paris. These rods were eight millimeters square, and something over three feet in length, slightly varying in size and weight, and held together by a pin or bolt (*cheville*) which passed through the holes. The ends of this pin had a bird's head — a duck or swan; the rods were confined at the top by a clasp in the form of a figurine, but could be readily separated if desired.

Their purpose was not recognized by Caylus, the discoverer, who says they could not have been musical instruments, for they produce no regular notes, and suggests that they might have been intended for use in feats of skill. A peculiarity which will at once attract the notice of the numismatist is the uniformity in number (usually six, rarely seven or eight) and weight of the spits which the bundles contain, and their evident relationship to the Etruscan pound shows as a consequence that these "handfuls" or drachms were designed to be used as money.

While the bundle at Rouen now has but five rods, it is certain that it originally contained six; they show a regular gradation in weight, from the first to the fifth; estimating from this the weight of the missing one, the set comes very closely to five Etruscan or ten Roman pounds — a *decussis*. It evidently belongs to a period earlier than the Sixth century B. C., when the Etruscan unit of weight was the *mina*, substantially twice that of the Roman pound. Its provenance is not known, but there seems to be no doubt of its Etruscan origin. Caylus describes one very similar found in July, 1760, in a stone tomb without any inscription, at ancient Picenum, an Etruscan city before that territory was conquered by the Romans. This was complete, having six spits. It

seems evident, therefore, that a set consisted of six rods of graduated sizes, the larger ones being used for the heavier roasting pieces.

The drachm being half the stater — the monetary unit — a stater of spits would weigh ten Etruscan pounds, and we know the Etruscans used the decimal system. We may compare these to the heavy bronze ingots, the primitive Roman *aes signatum*, some pieces of which, valued at five *ases* (*quincussis*), had a weight very near that of half a bundle of the spits — about 1560 grammes. Being an exact multiple of the unit of weight, they could be used for commercial purposes without weighing them at each transaction, and as they were easily separated, it is quite probable that a single spit or obolus served to "make change." The gross weight of a bundle was relatively great, — a single spit averaging from 444 to 454 grammes, while that of a sixth of a drachm amounts to 534 to 544 grammes. All these peculiarities seem to correspond very well with the mixed character of Etruscan money. They show not only the influence of Greek standards — the division of the drachm into six oboloi, but also the existence of a system of weights nearly equivalent to the Roman pound.

The question next arises — To what period shall we assign these bundles? Unfortunately it is now impossible to know what objects were exhumed with the sets at Rouen and in the *Bibliothèque nationale*; but by finds of spits, no longer of bronze but of iron, in burial places at Narce and Cervetri, we may fix their date with sufficient exactness. The Narce spits closely resemble those described above; they have the same broad, pierced head, and the same projections near the top; their length is almost exactly half of those in the Paris Museum, and it is extremely probable that they were intended to correspond more or less closely with a fixed system of weights.

M. Pasqui has published a full list of the objects found at Narce. In one large, square tomb, which had evidently been plundered in recent times, were small bronze rods (*fibulae*), Etruscan in form, a lance and knives of iron, and many iron spits, with vases, bronze tripods, pottery, etc. M. A. Cozza attributes them to the Seventh century B. C.; Déchelette, because of their archaic form and style of ornamentation, would assign them to the Eighth rather than to the Seventh.

The spit found at Cervetri closely resembles the preceding, and was doubtless intended to form a part of a bundle like that described above. The lower part is lacking, so that we cannot determine its original length. It came from the celebrated tomb "Regulini-Galassi," discovered in 1836, the objects found there being evidently of that Etruscan period marked by the appearance of Oriental influence on decorative art, and of the earliest inscriptions. Most Italian archaeologists assign this tomb to the Seventh century, while Montelius would fix the Ninth as its date. But notwithstanding the high authority of the eminent Swedish scholar, I prefer to adopt that generally accepted. With our present knowledge (assuming that the Narce spit is older than the Regulini-Galassi sepulchre) we shall not be far astray in attributing the spits to be described below to a period between the Sixth and Eighth centuries. Further researches in the museums of Etruria and the neighboring districts may settle this point.

Before leaving the Etruscan spits a word should be said of the design of the clasp — two swan's heads projecting on either side of the lower portion of a human figure — and its meaning. We notice at once a peculiar feature; the breast of the figure has a heart-shaped aperture which, by its position, might serve to receive a hook by which the bundle was suspended. If we had a better knowledge of the culinary utensils about the hearth-stone, we might perhaps solve the question of the etymology of the words *stater* and *anchora*.

As the drachm was half a stater, — a word which expresses the idea of two objects of equal weight, like the scale-pans of a balance, — and as the bundles of spits have a hole for suspension, may we not suppose, says our author, that a complete set was originally two bundles, each of six pieces, suspended by a double hook beside the hearth? If this be accepted, an *ἄγκυρα* (anchor or hook which was the name, according to Hesychius, of a triobol in Cyprus) might well be the hook by which the two sets of spits or drachms were suspended, the weight perhaps increased by rings (explained later). It is well known that Cyprus was the principal point in the Mediterranean for the production of copper or bronze utensils and the manufacture of the various metallic objects which continued to be used for so long a period as a means of exchange.

It has long been recognized that we must go back to the period when utensils were still a common measure, to explain the origin of *ἄγκυρα*; its trivial value (three oboloi) shows that it weighed but little, and was by no means the anchor of a vessel, though of similar form. These conjectures may be modified by future discoveries. I will only mention now a passage in a comedy by Anaxippus¹ cited by Athenaeus (IV: 160 B), from which it seems evident that in Athens, about the Fourth century, a complete set of spits consisted of twelve pieces, *i. e.* two drachms of six oboloi, and a well-equipped kitchen should have "twelve spits, a kettle, a large fork, etc."

Before the issue of coinage the make-up of drachms may have varied at different times and places. The *pempobolon* of Homer, an instrument the form of which has aroused controversy, was used in roasting the flesh of animals which had been sacrificed. I think the word shows that some Greeks in the Homeric epoch used a drachm of five spits. It has been believed on the authority of Alexandrian lexicographers that it means a five-pronged fork; but this is not a satisfactory explanation. If the spits of the *pempobolon* had been fastened to a handle like that of a fork or trident, all would turn together, and it would have been impossible to regulate the cooking of separate portions. Numismatically, the word signifies a piece of five oboloi.² And since in primitive times the *hexobolos* or drachm was a bundle of *six* spits, we may similarly claim that the *pentobolos* was a bundle of *five*, of which the Etruscan examples give us a very clear idea. The young men who assisted in the sacrifices so frequently described in the *Iliad* and *Odyssey* had *pempoboloi* in readiness for use in roasting certain portions of the victims, when the proper moment came in the course of the ceremony: —

The youths beside him [Chryses] held *pempoboloi*, and when the thighs were burnt out, and they had tasted the vitals, they sliced off the rest, and pierced it through with spits. *Iliad I*: 463-465.

¹ An Athenian comic poet who flourished in the time of Demetrius Poliorcetes at the beginning of the Fourth century, B. C.

² This division of a drachm was coined at Athens in the Fifth century. Babelon, *Traité des monnaies grecques et monnaies*, I: 422.

That is, the spits were separated when the time come to roast certain detached portions.¹ The author of the *Iliad* and the *Odyssey*, as is well known, drew his recitals in great measure from the ancient Aeolic songs. Consequently, if we consider the various archaeological facts and references which I wish to recall, we shall be led to the conclusion that the earliest history of the drachm is to be sought in Greece and Etruria, in the period immediately preceding the invention of coinage.

While the Aeolians used sets of five spits — pentoboloi, the Dorians preferred six. Because of the important iron mines of Sparta, whence its people obtained material for their arms and utensils, large quantities of iron hexoboloi were used for commercial purposes in the centuries immediately preceding the invention of silver coinage. Objects of such great utility would naturally become the chief standard of value in mercantile transactions. The powerful Dorian colonies in Italy and Sicily, especially Tarentum and Syracuse, extended their use throughout the peninsula. It is even probable that they circulated in Italy before the traditional dates of Greek colonization, that is, before the latter half of the Eighth century, for the Greeks usually established their settlements at points previously frequented by their merchant-mariners. Etruscan traders adopted them, but with some modifications in weight and material. The mines of Elba and Tyrrhenium produced an abundance of copper, but only a little iron: the rarity of the latter metal, and especially of iron weapons, at this period is well known. This is why we find bronze spits in Etruria long after the age of bronze, when the use of iron for such purposes would have been expected.

The hilt (or top) of the bundle of Etruscan spits was adorned with a small human figure, having on its sides two heads of water-fowl — swans or ducks. This peculiarity, exactly reproduced on each of two sets, requires some notice, and this we shall discuss in the closing portion of this paper.

[To be continued.]

DESTRUCTION OF THE PEI YANG MINT.

CHINA does not seem to be getting over her disorders, even though she has established a republic. We note in recent news items that the republican soldiers have broken out in mutiny for their back pay, and that in the early part of March they looted the Pei Yang mint, at Tien Tsin; they set it on fire, destroyed machinery to the value of many thousands of dollars, and, if reports are true, robbed it of everything portable. This mint, which furnishes a large part of the coins for Chih Li province, has issued many silver and copper coins of the modern-struck series. The earlier specimens of the silver had PEI YANG ARSENAL on them; the later issues, including the copper, had simply PEI YANG.

W.

¹ M. Déchelette notes a passage in the "Life of Homer," erroneously attributed to Herodotus, where it is said that "the Aeolians alone among the Greeks cooked the flesh of victims on *five* spits, while all the other Greeks used three," and thinks that this state-

ment (which is comparatively recent), is based on some ancient text which mentions has tiers with three sets of holders, three being the half of six, and that these sets might be double, as he shows in an engraving of one found at Grosseto. — ED.

PROCEEDINGS.

THE AMERICAN NUMISMATIC SOCIETY.

A REGULAR meeting of The American Numismatic Society was held on Saturday, December 16, 1911, at 4 P. M., Mr. Henry Russell Drowne, one of the Governors, presiding.

The following Reports were presented : —

REPORT OF THE COUNCIL

To the Officers and Members of The American Numismatic Society : —

Your Council would report the election of Mrs. William J. Busby, New York, as an Associate Member.

Respectfully submitted.

REPORT OF THE TREASURER

To the Officers and Members of The American Numismatic Society : —

CURRENT FUNDS		
Balance, November 18, 1911.....	\$198 89	
Receipts	48 40	
	<hr/>	\$247 29
Disbursements		121 42
		<hr/>
Balance		<u>\$125 87</u>

PERMANENT FUNDS

Balance, November 18, 1911 (unchanged).....	\$3,477 25
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CHARLES PRYER, *Treasurer.*

REPORT OF THE DIRECTOR

To the Officers and Members of The American Numismatic Society : —

Your Director would report that during the four weeks since the last meeting, the building has been open every day, and visited by seven hundred and eighty people.

The revised edition of the Catalogue of the Contemporary Medals in the Medallic Exhibition last year, has been completed and will be ready for delivery to subscribers in a few days. This makes a quarto volume of four hundred and thirty pages, with a large number of illustrations; an announcement of its publication has been sent to all the members. Great credit is due to Miss Baldwin for her careful and thorough work in compiling this catalogue.

While the accessions to the Library and collections are not large, a number of interesting things have been received.

His Majesty, Victor Emmanuel III, King of Italy, has presented the second volume of his splendid work, *Corpus Numorum Italicorum*.

From Mr. Edward D. Adams, the two folio volumes completing the illustrated supplement to Medallic Illustrations of Great Britain and Ireland, published by the British Museum.

The total accessions to the Library amount to thirteen books and forty-three pamphlets, periodicals and catalogues.

The accessions to the cabinets consist of the plaque of Henry Wadsworth Longfellow, by John Flanagan, published by the Grolier Club, 1911, and the plaque commemorating the Century of the Austrian Empire, 1904, by J. Tautenhayn, from Mr. Edward D. Adams; six plaquettes and four medals by E. Mouchon, from the artist; plaquette of J. H. Fabre, and medal of "King of the Golden Isle," from Monsieur Angelo Mariani; silver prize medal, awarded to Washington Irving in 1855, for distinction in American Literature, by the Women's College of Baltimore, silver coronation medal of George IV, and five Arabic coins from Mr. E. Morgan Grinnell; one Harrison medal in lead from Mr. Arthur Train; two silver medals of Holland, one Papal medal in silver, the official coronation medal of George V of England, medal for the best shot in the army in India, two of the new French medals of the Franco-Prussian War, one medal of Belgium, five decorations and three coins from Mr. J. Sanford Saltus, and a miniature decoration of the Order of Isabella the Catholic of Spain, in gold and enamel, from Mrs. E. R. Weston of Pasadena, California.

All of which is respectfully submitted.

BAUMAN L. BELDEN, *Director*.

The Chairman then introduced Mr. Julius de Lagerberg, who read a paper entitled "The Bird Shoot at Ferney, August 25, 1775," apropos of an unpublished medal of Voltaire.

A vote of thanks was unanimously tendered to Mr. de Lagerberg for his most interesting paper.

The meeting then adjourned.

BAUMAN L. BELDEN, *Secretary*.

NUMISMATIC SOCIETY OF INDIA.

A MEETING of the newly formed "Numismatic Society of India" was held at Delhi, in the camp of the Lieutenant Governor of the United Provinces, at the Coronation Durbar, December 9, 1911. Its membership now numbers forty-six. Dr. G. P. Taylor of Ahmadabad was elected President. We trust that this new Society will meet with unqualified success, for such an organization is certainly needed in India.

W.

MONTREAL NUMISMATIC AND ANTIQUARIAN SOCIETY.

The following gentlemen have been elected as officers of the Montreal Numismatic and Antiquarian Society for the coming year: *President*, W. D. Lighthall; *Vice-Presidents*, Ludger Gravel, C. T. Hart, Judge Eugene Lafontaine, James Reid, Rev. N. Dubois, and S. M. Baylis; *Honorary Treasurer*, George Durnford; *Honorary Curator*, R. W. McLachlan; *Honorary Recording Secretary*, C. A. Harwood; *Honorary Corresponding Secretary*, Pemberton Smith; *Librarian*, Victor Morin; *Councillors*, P. O. Tremblay, J. C. A. Herlot, G. N. Moncel, S. W. Ewing, A. Chaussé, Robert Pinkerton, E. Z. Massicotte, O. Lapalice, and P. J. L'Heureux.

THE CARNEGIE PEACE MEDAL.

THE Peace Medal designed by Mrs. Sally James Farnham, for presentation to Andrew Carnegie by the Union of American Republics, has been cast in fine gold by Messrs. Tiffany & Co. of New York. The planchet measures 56 by the American scale (three and one-half inches), and its weight is thirteen and one-half ounces. The obverse has on the left side of the field a clothed bust of Carnegie, in profile to right, but turned slightly toward the observer. Inscription at the right, in five lines, BENE | FACTOR | · OF · | HVMA- | NITY · The name of the artist, in small letters, in the drapery near the lower edge. Reverse, On the right of the field is a seated female figure, draped, her right hand extended towards a large building in the background on the left, her left resting on an elliptical shield. At her feet are leaves and fruit of American plants; resting on these, at the left, is a circle enclosing a cluster of twenty-one formal rays; its edge is inscribed VNION OF AMERICAN REPVBLICS At the top of the field is a radiant five-pointed star; in the space below it at the left, the inscription in seven lines, THE | AMERICAN | REPVBLICS | TO — | ANDREW | CARNEGIE | 1911 Around the edge, arranged in alphabetical order, beginning with Argentina and closing with Venezuela, are the names of the Republics forming the Union. The initials of the artist appear near the lower edge at the left.

NOTES ON COIN-FINDS.

SEVERAL of the foreign numismatic periodicals make a specialty of printing in their regular issues a record of discoveries of buried coins exhumed from time to time in various places. The frequency of these finds, some of which have been lying undisturbed for many centuries, is certainly surprising, while the number and variety of the pieces which they often contain, is even more so. In recent issues of one magazine sixty-two such deposits are briefly listed, and it may be of interest to American collectors to know something of their extent and variety. We note a few, taken at random from one of our exchanges: —

At Vitrolles, in the south of France, an earthen jar which contained more than one thousand "oboli of the wheel," coined at Massilia (Marseilles), was found. At Petit Grenouillet, a similar vessel with "many thousand" coins of the later Roman emperors — among them 820 pieces with 48 differing reverses of Postumus alone — showed the variety which makes these buried hoards so interesting to collectors. At Dompierre (Allier), in ditching for a conduit, a vase containing 3,600 pieces was dug up; of these 1,500 were of bronze, and the others silver and billon, representing more than thirty rulers from Antonine to Postumus. At Carthage a deposit of "many thousand" pieces, which included coins from various cities, from Antioch to Tarragona, with others of Italy, France, and Africa, showed how extensive was the commerce of that ancient rival of Rome.

In demolishing an ancient building at Nantes, an old, worm-eaten chest came to light, which had been hidden in the wall for ages; it contained gold and silver coins, many of which were carried away by the workmen who found it, and offered for sale in the markets, where they were refused; this was due to the fact that a large proportion of them were issued in the time of Alphonso VIII, of Castille, and bore Arabic legends; with these were Arabic dirhems; believing them to have no value, the workmen gave them to their children, who soon tired of

them and threw them away. Only about a quarter of the original deposit was recovered. Curiously, a number of double tournois of the seventeenth century were mingled with the older pieces, and the antiquaries have been unable to suggest a satisfactory explanation of the deposit.

One of the largest deposits mentioned was exhumed in Esthonia, where eight thousand were brought to light; the earliest dates were 1554, and the latest 1650, showing of course that the treasure had been buried more than two and a half centuries. On the other hand some of the small finds prove to be worth discovery. Near Fontainebleu a few pieces, perhaps thirty or forty in all, yielded several not previously known to collectors. Deposits like these are of special interest to local Societies.

A little casket of old coins, found in Bollingen, Wurtemberg, had an almost pathetic interest, for unlike most of these finds it had with it a scrap of writing which revealed the name of its former owner, and the date and occasion of its burial. Notwithstanding it had lain under ground for nearly three centuries, this could still be deciphered: — "*Der schwedt ist komme, hat als mitgnomme, hat auch walle hawe, i habs vergrave. 1634 Bozehartt.*" The editor remarks that those who recall the terror which was inspired by the Swedes in the Thirty Years' War, will find in this scrap, buried by its owner with his little treasure, valuable evidence to show, if that were needed, how many of these deposits testify to the wars which have desolated the world.

M.

BOOK NOTICE.

CHINESE OPENWORK AMULET COINS. By H. A. Ramsden, F. R. N. S., President of the Yokohama Numismatic Society, etc. Jun Kobayagawa Co., Yokohama, Japan. 1911. Small 8vo, pp. 60, 4 plates and numerous cuts.

Among the numerous correlated lines of far eastern numismatics, the talisman or amulet has an important share. A distinctive class of this large series is the openwork amulet, peculiar, for the most part, to China. Unlike many of these charms, they are not considered as merely luck-bearers, but serve a more efficacious use, it being the common belief that they destroy disease, exorcise demons, repel witchcraft, and ward off other evils. They invariably have a circular central hole, which would indicate that they were intended to be worn about the neck. Of the two hundred and three pieces described, over a third bear as a device two dragons. The fabulous ki lin (an auspicious animal which appears when sages are born) and the phoenix are used, as well as fish and deer. Floral and fruit designs also play a very large part in this series.

Judging from many of the specimens, their use must date from present times to a period many centuries back, the types remaining more or less constant throughout. Although most of this class are circular in form, there is a distinctive series with an ornament or hood at the top, a form which was evidently derived from draw-handles. The pamphlet is made especially valuable by the numerous illustrations, each variety being shown by a wood-cut, generally of the size of the original, and it justly claims to have brought together under one cover the greatest number of these amulet-coins which have ever been published. The compiler confines himself to the numismatic point of view, entirely, giving descriptions, but without attempting to connect their devices with the traditions and fables of the Celestial Empire.

W.



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No. 46.



No. 47. .Obv.



No. 51a.



No. 47. Rev.



No. 51.



No. 52.



No. 53.



No. 50. Obv.



No. 50. Rev.



No. 56. Obv.



No. 55.



No. 56. Rev.



No. 54.



1



2



3



4



5



6



7



8



9



10



11



12

UNCERTAIN MINTS.



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UNCERTAIN MINTS.



UNCERTAIN MINTS.

AMERICAN JOURNAL OF NUMISMATICS.

At mihi placido
Ipse domi, simul ac nummos contemplor in arca.
—Horatii, Sat. I, i. 66.

VOL. XLVI: No. 2.

NEW YORK.

APRIL, 1912.

REATTRIBUTION OF CERTAIN TETRADRACHMS OF ALEXANDER THE GREAT.

SIXTH PAPER.

(Continued from Vol. XLVI, p. 24.)

CILICIAN MINTS.

THE coins of distinctive Cilician fabric fall into five groups; but it cannot be said that each of these groups represents a separate mint.

Types 86 and 87 having some obverse dies in common, form the first group. In the same manner types 88, 89 and 90 form the second; types 91 to 98 inclusive the third; and types 99 to 111 the fourth group. Type 121 comprises the fifth group. Groups three and five are certainly from different mints. The fourth group really contains also types 112 to 120 inclusive, though only the first few of these show Cilician style. This is enough, however, to class them all as belonging to one series and the continuation of types 99 to 111. Müller's attribution of these latter pieces to Therma in Macedonia cannot therefore be endorsed.

CILICIAN DISTRICT.

Type No.	Symbol.	Title.	Refer.	Obv. dies.	Total obsv.	Rev. dies.	Specimens in Find.	Relation of dies.	Plate.
86	•		—	4	8	3	6	Loose	XIX, 1
87	A		M. 1291	6		31	50	"	XIX, 2
88	(no symbol)		—	4	16	5	9	"	XIX, 3
89	B		M. 1289	12		28	70	"	XIX, 4
90	B		—	5		13	23	"	XIX, 5
91	α ς	B	M. 1301	2	15	9	16	"	XIX, 6, 7
92	α ς		M. 1300	2		9	10	"	XIX, 8
93	α ς ς		M. 1298	5		14	25	"	XIX, 9
94	α ς ς		—	3		3	5	"	
95	BA ς	B	—	5		21	28	"	XIX, 10
96	BA ς	B	—	1		1	1	"	
97	BA ς		M. 1302	2		6	10	"	XIX, 11
98	AA ς	B	M. 1308	1		1	1	"	XIX, 12

Type No.	Symbol.	Title.	Refer.	Obv. dies.	Total obvs.	Rev. dies.	Specimens in Find.	Relation of dies.	Plate.
99	PLOW 1		M. 1282	1	7	1	1	Loose	
100	PLOW 1		—	3		13	20	"	XX, 1
101	PLOW 1		—	6		9	21	"	XX, 2
102	PLOW 1		M. 1284	6		14	20	"	XX, 3
103	PLOW 1		—	1		2	2	"	
104	PLOW 1		M. 1283	1		2	2	"	XX, 4
105	PLOW 1		—	2		3	4	"	XX, 5
106	PLOW 1		IP. ¹ 81	1	15	2	2	"	XX, 6
107	PLOW 1		—	1		1	1	"	
108	PLOW 1		—	2		2	2	"	XX, 7
109	PLOW 1		—	2		2	2	"	XX, 8
110	PLOW	R	M. 1280	1		3	3	"	XX, 9
111	PLOW 1	B	M. 1285	1		1	2	"	XX, 10
112	AP 1		—	1		1	1	"	XX, 11
113	AP 1	B	M. 1286	1		1	1	"	XX, 12
114	NIKE 1	B	IP. ¹ 92	2	15	2	2	"	XXI, 1
115	NIKE 1	B	M. 199	3		3	4	"	XXI, 2
116	NIKE 1	B	M. 198	4		6	5	"	XXI, 3
117	NIKE 1	B	IP. ¹ 91	1		2	2	"	
118	NIKE 17 E	B	M. 203	2		4	4	"	XXI, 4
119	NIKE 17 E	B	M. 204	1		2	2	"	XXI, 5
120	NIKE 17 E.	B	IP. ¹ 93	3		7	7	"	XXI, 6
121	SCORPION ME		M. 1337	5		8	15	Loose & Fixed	XXI, 7

379

MINTS UNDER CILICIAN INFLUENCE.

122	7	B	M. 1294	34		59	81	Fixed	XXI, 8, 9
123	BOW	B	M. 1288	3		3	4	"	XXI, 10
124	BOW		M. 1287	18		35	67	"	XXI, 11, 12

152

Total 1532

Correctly to apportion these several groups among those Cilician cities which probably issued coins under Alexander and his successors is no simple matter. In fact it may be said to be practically impossible at the present moment. Our knowledge of the conditions obtaining in Cilicia during the period under discussion is far too scant to warrant any conclusions; and the coins themselves help us but little. It is certain, though, that with the advent of Alexander into these regions all local autonomous issues,

as well as the Persian satrapal issues, ceased; and it is furthermore probable that a local Alexandrine coinage was instituted shortly afterwards at some or all of the principal cities, namely: Nagidos, Soli, Mallos, Tarsos, and Issos.

The symbol ☸ on coins of group 3 is identical with a type found on certain bronze coins struck at Tarsos during the 2d and 1st centuries B. C. The symbol ☸ (provided it is not a monogram composed of the letters OKI or OKΔ) reminds us of the well-known Baal symbol ☸. As Baal (or BAAL-TARS) was the particular god of Tarsos, it is well within the bounds of possibility that types 91-98 were struck in this city.

The plow seen in the field of types 99-111 may denote the mint (like the ram on the Damascus coinage) while the dots, letters, and symbols seen beneath the throne, or to the right of Zeus, probably served to distinguish the various magistrates, die-cutters or other mint-officials connected with the issuing of this coinage. Some of the earlier of the obverse dies are connected with as many as five or six of these reverse signs.

Type 121 has already been attributed by Müller to Commagene, on the strength of the scorpion symbol. The attribution is plausible but it lacks confirmation.

The Cilician issues maintained a high standard of excellence with respect to weights. Of forty-three specimens in mint state, twelve weighed between 17.10 and 17.19 grammes, thirty weighed between 17.20 and 17.30, and one weighed 17.35.

MINTS UNDER CILICIAN INFLUENCE.

The style of the earliest of these coins shows clearly that their die-cutters were under Cilician influence. Type 123 is an almost direct copy of type 91, while type 124 resembles very closely some of the coins of type 90. Strange to say, however, the Syrian (or Phoenician) custom of striking coins from hinged or adjusted dies was followed. Such coins are not found among the issues which can be attributed to Cilicia. The style, though evidently influenced by the Cilician coins, is much poorer, the workmanship coarse, — at times almost barbarous.

To choose a mint for these coins is as yet impossible, but style and manufacture together place them in some district not far from the north-east corner of the Mediterranean Sea.


The weights of type 123 show a gradual deterioration from 17.15-17.25 grammes at the commencement, to 17.10-17.14 at the end of the issue. Types 124 and 125 keep an average well above 17.20 throughout the entire period of their issue.

SYRIA AND PHOENICIA.

Type No.	Symbol.	Refer.	Obv. dies.	Total obsvs.	Rev. dies.	Relation of dies.	Specimens in find.	Plate.
125	Γ A	—	4		6	Adjusted	14	XXII, 1
ARADOS.								
126	(style II) ϳ	H. "k" ⁴⁵	17		24	Adjusted	28	XXII, 2
127	(style IV) ϳ	R. 64 ⁴⁶	7		5	"	5	XXII, 3
128	Obv. Δ Rev. ϳ	—	2		3	Loose	4	XXII, 4
129	Obv. M Rev. ϳ	—	2		7	"	8	XXII, 5
130		R. 48	14		16	"	17	XXII, 6
131	Σ ϳ	R. 52	18		29	"	32	XXII, 7, 8
132	Λ ϳ	R. 50	6		10	"	10	XXII, 9, 10
133	Δ ϳ	R. 54	2	3	3	"	3	XXII, 11
134	Ι ϳ	R. 49a	2		3	"	3	XXII, 12
135	⊞ ϳ	R. 49	14			"		
136	⊞ ϳ	}			15	"	16	XXIII, 1
137	⊞ ϳ					"		
138	A ϳ	H. "h"	2		2	"	3	XXIII, 2
139	Σ ϳ	R. 51	5		10	"	15	XXIII, 3
140	KADUKEUS ϳ	R. 56	41		67	"	75	XXIII, 4

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SIDON.

141	Σ	M. 1320	6		14	Adjusted or fixed.	36	XXIII, 5
142	IVY LEAF Σ	M. 1318	1	1	1	"	1	XXIII, 6
143	GALLEY ΣΙ	—	1		2	"	2	XXIII, 7
144	ΣΙ	H. 1	1		3	"	6	XXIII, 8
145	 ΣΙ	—	1		2	"	2	XXIII, 9
146	Ⓒ ΣΙ	H. 12	1		1	"	2	XXIII, 10
147	λ ΣΙ	H. 16	1		2	"	4	XXIII, 11
148	(ΦΙΛΙΓΓΟΥ) Ο ΣΙ	H. 2	1		1	"	1	XXIII, 12

54

AKE.

149	Υ 9	—	1		3	Adjusted	9	XXIV, 1
150	Υ 4	—	2	3	4	"	10	XXIV, 2
151	FULMEN	—	2		4	"	9	XXIV, 3
152	Σ	Pl. 79	2	10	4	Loose	7	XXIV, 4
153	M	—	2		7	"	17	XXIV, 5
154	O	—	5		20	"	38	XXIV, 6
155	40	M. 1427	3		6	"	13	XXIV, 7
156	42	M. 1433	2		3	"	4	XXIV, 8

⁴⁵ Hill, "Notes on the Alexandrine Coinage of Phoenicia," *Numisma*, IV: 1909.

⁴⁶ Rouvier, "Numismatique des Villes de la Phé-

nicie," *Journ. Intern. d'Arch. et Num.*, III (1900) to VII (1909).

Type No.	Symbol.	Refer.	Obv. dies.	Total obsvs.	Rev. dies.	Relation of dies.	Specimens in find.	Plate.
157	49	M. 1434	2	5	5	Loose	5	XXIV, 9
158	40	M. 1435	2		3	"	5	
159	40	—	2		4	"	7	
160	40	M. 1436	1		7	"	7	
161	40	M. 1437	1		2	"	2	XXIV, 10
							133	

UNCERTAIN MINT.

162	51	M. 1293	4	6	9	Loose	12	XXIV, 11
163	51	—	1		1	"	2	
164	51	M. 1292	2		6	"	7	
165	51	—	1		6	"	13	XXIV, 12
							<hr/>	
							34	

DAMASCUS.

166	51	M. 1345	1	3	2	Adjusted	2	XXV, 1	
167	51	—	2		2	"	2		
168	51	—	1		1	"	1		
169	51	M. 1346	1		2	"	2		
170	—	—	1	48	1	"	2		
171	RAM	M. 1339			25	"	49		
172	RAM	M. 1340			17	"	31	XXV, 2	
173	RAM	—			1	"	1		
174	RAM	—			18	"	37		
175	RAM	—			4	"	8		
176	RAM	—			5	"	9		
177	RAM	—			24	"	41	XXV, 3	
178	RAM	M. 1341			2	"	3		
179	RAM	—			1	"	2	XXV, 4	
180	RAM	M. 1342			1	"	3	XXV, 5	
181	RAM	M. 1344			4	"	9	XXV, 6	
182	RAM	M. 1338			17	"	42	XXV, 7	
							244		
Total,							2230		

SYRIA AND PHOENICIA.

UNCERTAIN MINT.

Type 125 has been placed here on account of its close resemblance to a certain tetradrachm published by Babelon⁴⁷ which seems to have been the first of the Alexander type issued from the Arados mint. Unfortunately there were no coins of this rare variety among the lots that reached me from the Deman-hur find. As its presence in the hoard might be looked for, perhaps some

⁴⁷ Babelon: *Mélanges Numismatiques*, p. 242, Pl. X, fig. 2.

other collector, more fortunate than I, has been able to secure one. On the strength of this resemblance type 125 may be attributed to Arados or some neighboring mint. The weights for five uncirculated specimens are 17.18, 17.20, 17.22, 17.24 and 17.30 grammes respectively.

ARADOS.

Coins of types 126 and 127 have long been given to Arados—an attribution supported by the monogram (which is found on later undoubted Aradian Alexanders), and by the fact that the style on some is very similar to the above-mentioned coin published by Babelon as certainly struck at Arados. The style found in types 126 and 127 shows a steady progression from what Müller calls "style II" to his "style IV"—a development which must have covered a number of years. On Plate XXII are shown the two extremes—space has prevented the reproduction of the intermediate stages. Like other Phoenician issues the coins are struck from adjusted,—in some cases, perhaps, from fixed dies.

When we come to the series represented by types 128 to 140, we are at once in serious difficulties if we propose to attribute them also—as indeed they always have been—to Arados. The time limit of twenty-five years, namely 333–308 B. C.,⁴⁸ to which our coins belong, seems too short a space to hold both series, each of which must have consumed a number of years in developing their respective styles. The Demanhur specimens of the earliest coins of each of these series are worn; those of the latest are all in mint state. It is therefore impossible to think of the one series as succeeding the other. On the other hand, the styles of the two series are so totally different in feeling and execution that it is well-nigh impossible to think of them as belonging to contemporary coinages of the same mint. Also, types 126 and 127 are struck from adjusted, and types 128 to 140 from loose dies. If it is comparatively easy to throw doubt on their attribution to a common mint, it is another matter to suggest a better. The internal evidences presented by each series, when taken separately, are far from inimical to an Aradian attribution of these coins. The solution perhaps may be that types 126 and 127 were local city issues; types 128 to 140 were regal or military issues, struck by Alexander's generals or successors at Arados, but under separate management and in a separate mint. This might account, in a degree, for the great divergence of the two series in style, execution, monograms, and other details.

Of the second series, types 128 and 129, with the letters Δ and M on their respective obverses, are both unpublished and important. By monogram they are connected with types 130 to 140, but their style shows them to have

⁴⁸ It will be shown later that the Demanhur hoard could not have been buried after 308–307 B. C.

been earlier in date. For the arrangement of types 130 to 140 we find that J. N. Svoronos, in his great work on the coins of the Ptolemies,⁴⁹ has adapted these Aradian Alexanders to his theory, and contends that the letters Δ, Ζ, Ι, Λ, Σ, are alphabetical dates such as were frequently used for dating the true Ptolemaic issues. He has moreover assigned these Alexanders to the years 307–293 B. C. As our hoard was already buried by 307 B. C., these dates are evidently too late. Mr. G. F. Hill, in his monograph⁵⁰ on this subject, also considers these letters to be annual dates, but refers them to the era of Alexander the Great commencing in Phoenicia with the year 333–332 B. C. The Demanhur hoard which has enabled us to study and compare so large a number of these particular Aradian coins, forces us to the conclusion that the date theory, so far as this coinage is concerned, will have to be abandoned: for we find ourselves attributing to the first year (333–332 B. C., and of this only the months January to September, for Arados did not open its gates to the Greeks till about January of 332) firstly, the tetradrachms published by Babelon — as this is the earliest Alexander struck in this mint; secondly, types 128 and 129, as their style shows them to be earlier than the series Α, Δ, Ζ, Ι, Λ, Σ, ΣΩ, and lastly, type 138 with the letter Α (= year 1) — manifestly too great a diversity of types and styles to crowd into the short space of eight or nine months. We might perhaps refer the dates Α, Δ, Ζ, Ι, Λ, Σ, to an era commencing with the *death* of Alexander (323 B. C.); but this again would carry our series of dates beyond the burial year of our hoard. Again, we can not well separate ΣΩ (type 139) from the series Α, Δ, Ζ, Ι, Λ, Σ, of which it seems to be an integral part; but ΣΩ can only be considered as a monogram, not a date letter.

Let us take up the question from another point. The earliest coins of the series 130 to 140 are those of type 130 with no letter in the field. The style shows this clearly: the absence of an exergual line, the Zeus-figure of modified Cilician style, his stiff attitude and parallel legs, and the absence of a back to the throne, all bind these coins closely to those of types 128 and 129. Identical in style with type 130 are a few coins of types 131 and 132 with Λ and Σ in their reverse fields. If our letters were dates we should naturally have expected Α (1) and Δ (4) instead of Λ (11) and Σ (18). The remaining coins of Λ and Σ are most similar to Δ and Ι. Besides, there also happen to be in my possession coins of Δ and Ι with their obverses from the same die. Under the conditions obtaining in mints of the ancients, it would be somewhat strange if a die made in the year 4 (Δ) could still be in use in the year 9 (Ι) and exhibit at the same time but little, if any, wear. Especially

⁴⁹ Τὰ Νομίσματα τοῦ Κράτους τῶν Πτολεμαίων. Athens, 1904.

⁵⁰ Hill, "Notes on the Alexandrine Coinage of Phoenicia." *Nomisma*, IV: 1909.

is this true if we remember that for the intervening year 8 (Ξ) there was a very large coinage. A more plausible solution might be to consider Δ and I as signatures of magistrates who were in office either the same year or in consecutive years. The continued use of a die would not then be unusual. As the sum total of these facts seems to speak so decidedly against the theory that Δ , Δ , Z, I, Λ , Σ , are alphabetical dates, would it not be better to explain them all as the initials or private marks of magistrates superintending the coinage? This would also account for $\Sigma\Omega$ and the Kadukeus symbol (type 140) which under the old system would be abnormal signs and difficult to explain. Above all, it would obviate the hopeless and impossible muddle of styles which results from the sequence proposed by Svoronos and Rouvier, and accepted by Hill.

The weights of our coins vary but slightly. Types 126, 127, 128 and 129 average slightly over 17.20. Types 130 to 140 average slightly under 17.20 grammes.

SIDON.

Types 142 and 143 have their obverses from the same die. This connecting link, together with evidences of style, enables us to attribute 141, as well, to the Sidon mint. Müller had previously given both 141 and 142 to Soli in Cilicia. In the case of Sidon the letters (at first Phoenician, then Greek), seen in the left field of the coins, are undoubtedly dates. It has also been proved that they refer to the era of Alexander the Great which began 333-332 B. C., in Phoenicia.⁵¹ The Demanhur hoard probably contained specimens of the years 10 (K), 11 (Λ), 12 (M), 13 (N), 15 (Π), etc., but being very rare and much sought after, they were probably picked out of the hoard shortly after its discovery; at any rate, none chanced to reach me. Of six coins, all in mint state, four weighed 17.20 grammes; the other two weigh 17.24 and 17.25 grammes respectively.

AKE.

My reasons for radically disturbing the orthodox and hitherto accepted arrangement of the Ake issues are too many and too complex to give here in detail. It is my intention to incorporate them in a future monograph on the Alexander issues of the Phoenician cities. Suffice it now to say that dated coins were first struck at Ake in the twentieth year of Alexander's Eastern era (=313 B. C.), continued through to the fortieth year (=293 B. C.), when the era of Alexander was superseded by the era of the battle of Ipsos (301 B. C.), and coins dated in the eighth, ninth, tenth, eleventh, and thirteenth (?) years of the new era were issued, probably by Ptolemy I of Egypt. The main objec-

⁵¹ Rouvier, *Revue Numismatique*: 1909, pp. 321-354.

tion to this proposed arrangement is that it does not seem to take into account certain published coins dated 5, 6, 14, 15, and 16. The first two and the last one can be proved to have been misread, and so do not exist; 14 and 15, if they exist, may of course be placed at the end of the new arrangement.

The first of the Alexander issues of the Ake mint are represented by types 149 and 150 with Phoenician letters in the field and under the throne: types 150 and 151 have an obverse die in common, and so were certainly issued from a common mint. To these types 152 and 153 are so similar in style that they can not well be separated from them — the required "mule," or connecting link, will no doubt turn up some day to prove this combination. Of one thing at least we are certain: there being in my possession certain coins which by their identical obverse dies bind types 152 and 153, 152 and 154, 153 and 154, and as the key-stone to these combinations, 154 and 155, 155 and 156, we have certain proof that types 152-154 were struck at Ake. The letter O on type 154 appears to be the Phoenician letter γ , commencement of the name $\gamma\kappa$ (AKA) which in the next issue (155) was placed in the left field of the coins. The next issue is similar, but beneath $\gamma\kappa$ we now see the date π (20). The year $\pi \text{ III } \pi$ (25) is the latest date found in the Demanhur hoard, — at least careful inquiries have not elicited any more which can certainly be traced to this find.

The weights of the Ake issues show unusual irregularity, varying from 16.75 to 17.27 grammes per coin.

UNCERTAIN MINT.

These types have been separated from type 87 and placed here on account of their great similarity to the Ake issues. This similarity is seen in their styles, fabric, and minor peculiarities. Types 162-165 are struck from loose dies. Weights of uncirculated specimens vary between 17.10 and 17.24 grammes.

DAMASCUS.

Next to Arados, Damascus seems to have been the most prolific mint in the Syro-Phoenician district, probably on account of its strategical and commercial importance, as it commanded the shortest trade route between Egypt, Phoenicia and the province of Babylonia — the seat of Alexander's new capital.

Types 166 to 169, with $\overline{\text{APX}}$ in the field, are seen by their style to be the earliest issues. Types 170 to 184, with the forepart of a ram in the field, may chronologically be divided into two parts, an earlier and a later, by the relative position of the feet of Zeus. In the earlier, the right foot is partly hidden behind the left; in the later it is seen quite separate and sometimes well out

in the field of the coin. Coins showing this later type must have been issued but shortly before the hoard's burial, as all of the Demanhur specimens that I have seen are practically uncirculated.

Though loose dies were used at this mint, their adjustment (by hand) must have been carefully attended to, as every one of the 244 odd specimens inspected invariably shows the relative position of the dies thus ††, with but slight variations to right or left. The private marks ., :, †, ‡, ..., Φ, etc., do not seem to have indicated distinct issues or distinct *officinae* of the mint. They were used contemporaneously with each other throughout the entire period of activity in the Damascus mint—a period we can not well put at less than ten years. There are in my possession over a score of series of these Damascus coins, each series struck from one obverse die,—the reverses, however, bearing the above-mentioned marks in various combinations of three, four, and five for each series. These marks can not therefore have been used to indicate distinct issues or *officinae* of the mint, as, in this case, a common obverse die would hardly have been employed. It might be suggested that the marks were of some private nature, perhaps to distinguish die-cutters, magistrates, or other officials employed in the mint. It is curious to note that in later times, under the Roman Emperors Trajan Decius, Trebonian, and Volusian, a similar system of marking coins by dots was used in their eastern mint at Antioch.

The thirty-two uncirculated specimens weighed give as results: one 16.39; one 17.20; one 17.22; two 17.23; six 17.24; fourteen 17.25; five 17.26, and two 17.27 grammes; showing, with one remarkable exception, a closer maintenance of the norm than was usual among the coins we are studying.

UNCERTAIN MINTS.

The Eastern origin of this group of Alexander tetradrachms (183-8) is well attested both by the style and by the relationship of their dies, but to assign them to any one mint is as yet impossible. In a vague way they seem to be connected with a coinage attributed by Imhoof-Blumer⁵² to the mint at Babylon. In type 183 we have the M alone; soon a Φ appears in the field, and often a symbol beneath the M. In the following group we at first (type 189) see the Φ in the field and the M beneath the throne just as before, but this is followed by type 190, where we see the Φ placed beneath the throne and over the M. While the groups 183-188, and 189-190 seem thus connected by monograms, the divergence of their styles is so marked that it is impossible to assign them both to one mint. In style, types 189-190 are strikingly similar to the group which, as stated above, Imhoof-Blumer has attributed to Babylon. On these

⁵² *Numismatische Zeitschrift*, Vol. XXVII.

latter the M is still under the throne, but the Φ has been changed to the monogram W (perhaps to be resolved into the letters $\Phi\text{I}\Lambda\text{O}\Xi$), and a symbol has been added, sometimes in the exergue, sometimes in the field.

Uncirculated specimens of types 183-188 weigh 17.16, 17.21, 17.22, 17.26, and 17.27 grammes; of type 189, 17.21; of type 190, 17.20, 17.21 grammes.

UNCERTAIN MINTS.

Type No.	Symbol.	Refer.	Obv. dies.	Total dies.	Rev. dies.	Relation of dies.	Specimens in find.	Plate.
183	M	—	1	6	1	Adjusted	2	
184	Φ M	—	6		26	"	28	XXV, 8
185	Φ M DOLPHIN	—	1		2	"	2	XXV, 9
186	Φ M KYLIX	—	1		1	"	2	
187	Φ M TRIDENT	—	1		1	"	1	
188	Φ M GRAPES	—	1		2	"	2	XXV, 10
							37	
BABYLON (?).								
189	Φ M	—	2		2	Adjusted	2	XXV, 11
190	Φ } M }	M. 805	3		6	"	6	XXV, 12
							8	

The coins below may be divided into four groups or sections, as indicated over types 191, 194, etc. In Group A are those with the symbol in the *exergue*, while a monogram composed of W combined with Φ between its upright bars, and placed over the letter M, is beneath the throne. This monogram appears on *all* the types from 191 to 240, both inclusive, but is omitted below, for convenience in tabulating. Group B is similar to Group A, but the symbol is in the *field*; the monogram and M are beneath the throne. Group C has the symbol in the *field over* M in each case (the M omitted in the table), and the monogram *alone* is under the throne. (Type 234 of this Group, and 240 of Group D, have no symbol, but only M, as in the table.) Group D is similar to C but with the title $\text{BA}\Xi\text{I}\Lambda\text{E}\Omega\Xi$. Groups A and B are contemporaneous, and were followed by Groups C and D in the order named. An obverse die will often be found used for two groups, such as A and B, or B and C, or C and D, but never otherwise, thus showing that little time elapsed between the striking of the several groups. In the four groups (191-240) there are a total of sixty-one obverse dies.

BABYLON (Circa 330-323 B. C.).

GROUP A.

Type No.	Symbol.	Refer.	Obv. dies.	Rev. dies.	Relation of dies.	Specimens in find.	Plate.
191	KADUKEUS	M. 690	5	8	Loose	13	XXVI, 1
192	CLUB	—	4	5	"	6	XXVI, 2
193	TRIDENT	—	3	4	"	5	XXVI, 3

GROUP B.

Type No.	Symbol.	Refer.	Obv. dies.	Rev. dies.	Relation of dies.	Specimens in find.	Plate.
194	BIRD	—	4	4	Loose	12	XXVI, 4
195	WREATH	—	4	6	"	13	XXVI, 5
196	STAR	M. 684	4	4	"	5	XXVI, 6
197	BEE	M. 697	7	8	"	21	XXVI, 7
198	TORCH	M. 704	5	8	"	13	XXVI, 8
199	SERPENT	—	5	7	"	9	XXVI, 9
200	DOLPHIN	M. 699	5	5	"	7	XXVI, 10
201	IVV	M. 691	4	4	"	4	XXVI, 11
202	LION SCALP	M. 694	4	5	"	6	XXVI, 12
203	NIKE	M. 687	3	3	"	4	XXVII, 1
204	DEMETER	M. 701	3	2	"	3	XXVII, 2
205	PICK	—	2	1	"	3	XXVII, 3
206	GRAPES	M. 693	4	6	"	7	XXVII, 4
207	8\	M. 678	3	3	"	6	XXVII, 5
208	PROW	—	1	1	"	1	XXVII, 6
209	AKROSTOLION	—	1	1	"	1	XXVII, 7
210	ROSE	—	2	2	"	3	XXVII, 8
211	KYLIX	—	4	4	"	8	XXVII, 9
212	FULMEN	M. 679	3	4	"	6	XXVII, 10
213	TRIDENT	—	2	2	"	2	XXVII, 11
214	WHEAT EAR	M. 700	4	5	"	9	XXVII, 12
215	EAR (?)	—	2	2	"	2	XXVIII, 1
216	LION	M. 705(?)	1	1	"	1	XXVIII, 2
217	SICKLE	—	3	4	"	6	XXVIII, 3
218	KADUKEUS	M. 689	1	1	"	1	XXVIII, 4
	DOUBTFUL				"	7	

GROUP C.

219	CLUB	M. 682	4	4	Loose	4	XXVIII, 5
220	STAR	M. 683	2	2	"	2	XXVIII, 6
221	BEE	M. 696	2	2	"	2	
222	CAP	M. 707	2	2	"	4	XXVIII, 7
223	NIKE	M. 686	1	1	"	3	XXVIII, 8
224	EAR (?)	M. 702	2	2	"	2	XXVIII, 9
225	GRAPES	M. 692	6	6	"	7	
226	KADUKEUS	M. 688	3	3	"	3	XXVIII, 10
227	TRIDENT	M. 680	1	1	"	2	XXVIII, 11
228	DOLPHIN	M. 698	2	2	"	2	XXVIII, 12
229	KYLIX	—	3	5	"	5	XXIX, 1
230	FULMEN	—	2	3	"	3	
231	RAKE (?)	—	1	2	"	2	XXIX, 2
232	SICKLE	M. 703	1	2	"	2	
233	TORCH	—	1	1	"	1	
234	M	M. 671	3	2	"	2	



Type No.	Symbol.	GROUP D.					Plate.
		Refer.	Obv. dies.	Rev. dies.	Relation of dies.	Specimens in find.	
235	EAR (?)	—	2	3	Loose	3	XXIX, 3
236	CLUB	—	1	1	"	1	XXIX, 4
237	GRAPES	—	2	2	"	2	
238	TORCH	—	1	1	"	1	
239	SICKLE	—	1	1	"	1	
240	M	M. 672	3	5	"	11	

BABYLON (323-317 B. C., and later).

241	ΦΙΛΙΠΠΟΥ ΒΑΣΙΛΕΩΣ M H	M. 103	2	2	Loose	1	XXIX, 5
242	ΦΙΛΙΠΠΟΥ ΒΑΣΙΛΕΩΣ M ϙ	M. 104	2	2	"	2	XXIX, 6
243	ΦΙΛΙΠΠΟΥ ΒΑΣΙΛΕΩΣ M AY	M. 99	6	6	"	6	XXIX, 7
244	ΑΛΕΞΑΝΔΡΟΥ " M AY	M. 1272	8	12	"	6	XXIX, 8, 9

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ALEXANDRIA (EGYPT).

245	FULMEN 	M. 10	1	2	Fixed	2	XXIX, 10
246	FULMEN ΔΙ	M. 7	6	7	Adjusted	8	XXIX, 11
247	RAM'S HEAD Δ	M. 1517	4	7	Fixed	8	XXIX, 12
248	PEGASOS 	M. 601	1	1	"	1	XXX, 1

UNCERTAIN MINTS.

Type No.	Symbol.	Refer.	Obv. dies.	Total obvs.	Rev. dies.	Relation of dies.	Specimens in find.	Plate.
249	ROSE ΔΙ	M. 123	1	5	1	Adjusted	1	XXX, 2
250	ROSE ΔΙο	M. 124	5		15	"	16	XXX, 3
251	WREATH ΔΙ	M. 550	22	24	39	Loose	46	XXX, 4
252	ΔΙ Ε	M. 217	3		7	"	8	XXX, 5
253	ΑΙ ΒΞ	M. 1483	1	1	3	"	3	XXX, 6
254	-Β ΒΞ	M. 1482	1		2	"	2	XXX, 7
255	ΦΙ ΒΞ	—	1		2	"	2	XXX, 8
256	WREATH	—				Fixed	1	XXX, 9
257	TROPHY	—				"	1	XXX, 10
258	PROW	—	4		13	"	17	XXX, 11, 12

116

Grand total, 2645

EDWARD T. NEWELL.

[The conclusion of this discussion of Reattributions of the Tetradrachms of Alexander the Great, together with notes on the four preceding groups and on the Babylonian Mint, and the plates which illustrate them (XXVI-XXX), must be deferred to the next number of the *Journal*, which will also have Mr. Newell's comments on the probable date of the burial of the Demanhur hoard. — ED.].

THE ORIGINS OF THE DRACHM AND OBOLUS.

BY M. JOSEPH DÉCHELETTE.

(Translated for the *Journal*.)

[Concluded.]

IN explaining his theory of the significance of the human figure between swans' heads, at the top of the sets or "drachms" of spits, as described in the last issue of the *Journal*, M. Déchelette refers to his work on "The Worship of the Sun in Prehistoric Times," in which he shows by numerous examples that in Italy and neighboring countries, about the close of the bronze and the beginning of the iron age, there was a close connection in the fundamental idea (*leit motiv*) of the wheel and the human figure between two swans, or swans' heads; he remarks that the conventional treatment of the head of this bird is frequently confused with that of the duck. He believes that this was not a mere ornament, but had an essentially religious meaning, and that the wheel, with its modifications, of which the swastika is the chief, really symbolized the sun. Little by little the original idea was forgotten, but the identity of meaning has long been recognized by numismatists, if not so generally by archaeologists. On Italian, Ligurian, Umbrian and Etruscan monuments, the solar wheel is accompanied by two swans,—a natural association, since this bird, which was sacred among the Ligurians, is found in Greek art as the companion and attribute of an ancient solar divinity among the people of the North—the "Hyperborean Apollo." He further shows that in the Etruscan period a human figure—sometimes standing, sometimes a bust, is often substituted for the wheel, and belongs to the group of Greek divinities; in a word, that the wheel and the figure between two swans, were used indifferently to symbolize the same idea.

Among all the Italian—I may even say among all the Aryan peoples, from the most ancient times, the hearth-stone was the domestic altar, where the head of the family offered the prescribed sacrifices in honor of the dead. . . . Its furnishings,—the andirons, fire-dogs and spits—had a place in the domestic ritual observances. In Gaul the fire-dogs (*chenets*) of terra-cotta almost invariably had a ram's head, and the persistency with which it occurs, justifies us in giving it a religious meaning. In Italy this consecration of the kitchen utensils is still more apparent. In some places a horse attached to the solar wheel takes the place of the ram. By the Etruscans the swan was substituted. Among the earliest solar emblems used by European peoples, the horse and swan had the same function, both being indifferently used to draw the wheel. As the worship of celestial fires (the sun and lightning), was mingled with that of the flame kindled on the domestic altar, all the implements of the hearth-stone received the image of one of these two animals (the ram or the horse)—though sometimes that of the bull, the type of the thunder-bolt. Indeed, not one of these implements discovered in Italy has been found which does not have for its chief ornament—if it has any—one or the other of these figures.

In proposing below a new theory of the myth of "Charon's obolus" I shall show how these same ideas passed from the kitchen to the funeral furnishings, because of the intimate connection between the family hearth and the burial rites. We are not surprised to find on the Villanovian ossuaries (the vases used for funeral purposes) decorations which embody these designs exclusively, having a well established meaning—

wheels, starry disks, circles, swans or water-fowls, swastikas, and small human figures.¹ From the numismatic point of view this supplies a logical explanation of an undoubted fact — the frequent occurrence of the wheel, the swastika, and their graphic derivatives on the most ancient coins.

This frequent appearance of the swastika on the first Greek coins, especially those of the Seventh and Sixth centuries, and consequently at a period closely approaching if not contemporaneous with the invention of coinage, has led numismatists to assign it a priority above other monetary types. But the wheel and the swastika are really the principal varieties of the same symbol, and their presence on the most ancient coins is because the Greco-Italian peoples, in selecting articles for currency, chose the furniture of the hearth — the caldron² in which food was boiled, the tripod which supported it, the spits on which viands were roasted, and perhaps also the hook (*ἄγκυρα*), by which the sets were suspended. As most of these are in our collections, and have been carefully studied, we are able to assign their date to that of the invention of coinage, or a little earlier. And these utensils are precisely those which are ornamented with solar symbols.

In Northern Italy and Central Europe there is scarcely any work³ of the copper-smith of this period — vessels or large vases — which does not bear the swans and a wheel or its derivatives. It is extremely probable that this was the case in the Dipyllian epoch in several Greek countries; for their close affinity in art, and the similarity in design on their vases, etc., had its origin in a common creed. But our knowledge of Greek household furniture at that period is too imperfect for us to compare it with the numerous and typical Etruscan finds.

I firmly believe that in a large part of Greece and Italy, particularly among the Dorians and Etruscans, the implements of the hearth (and as such consecrated to domestic worship and the fire-deities) immediately preceded coins as a means of exchange, and very naturally received the traditional symbols of the period — the wheel and swastika. Here and there their archaic designs lingered long. As to the swan of ancient Europe, I have shown it comes from the Hallstadian period, when, because of the entrance of Oriental fauna into Greco-Italian art, it lost much of its importance. It was well-nigh impossible for the first monetary artists to portray so complex a subject as swans escorting a wheel (or its equivalent); it was enough for their purpose if the principal device, the wheel or the swastika, was shown. Preference was given to the latter, for it was easier to engrave a figure composed of rectangular lines than to draw a circle, — a matter of practical importance when the technique of coinage was still in its early stages.

While I know of no example of the drachm or spit-bundle in Roman finds, its wide use in northern Etruria indicates that it served the same end in the Latium markets, and we may well believe that the memory of the primitive circulating medium had its influence on the origin of the legends concerning the iron money of Numa.

The Primitive Drachm and Obolus among the Celts. From the "Periplus" of the pseudo-*Psylax*, we learn that the Senonian Gauls, after taking part in the capture of

¹ This observation applies with equal truth to the funerary objects found in Mycenaean burial-places. See *Le Culte du Soleil*, p. 34.

² On the caldron as a common measure of value in the Homeric epoch see Babelon, *Les Origines de la Monnaie*, p. 72.

Rome (390 B. C.), established themselves on the shores of the Adriatic, near the present Ancona and Rimini, to be driven out by the Roman legions in 283 B. C. Fortunately for archaeology a rich necropolis of this people, dating from that brief occupation, has been discovered at Montefortino (about three kilometres from Arcevia). By its aid the approximate time of sepulture and the age of the buried objects have been clearly established. A systematic search in 1894-96 showed a large variety of articles of unusual number and value, though the interments were comparatively few. The forty-seven tombs explored were, without exception, more or less exactly oriented. Most of the graves, especially those containing many deposits, had been walled in and covered with horizontal slabs of stone, after the interment of the body, which was usually laid on the bare ground, though occasionally placed in a coffin of wood.

The buried warriors had continued to use their old accoutrements, and constantly wore the heavy iron swords which spread such havoc along the Mediterranean shores—that sword so erroneously described by Polybius. The presence of this weapon would of itself be sufficient to prove their Celtic origin. The graves resemble those in the Marne cemeteries, but their luxurious furnishings and the character and abundance of the treasures they contain reveal the rapid progress of Etruscan civilization among the Celts, and show how profoundly their customs were influenced by the close contact of the two peoples. . . . It is in these Senonian graves that we find the old Etruscan spits, no longer of bronze but of iron, like those of Sparta, Argos and Byzantium.

From an inventory made by Brizzio, M. Déchelette quotes a list of articles found in seven tombs, in each of which, whether of men or women, iron spits in sets had been deposited with treasures of gold, silver, gems, figurines, etc. In two there were andirons (*chenets*) of iron, and in four were large knives for cutting up the viands for cooking, showing that here as in Narce the ancient customs still lingered. Brizzio was not aware of the examples of bronze spits described above, and therefore could not judge of their origin; their connection with monetary obols did not occur to him, and he does not give their weights; their condition, as indicated by his illustrations, shows that, had he done so, we could have gained no definite knowledge of their original weight, but their close resemblance to the Etruscan bundles is evident. He remarks that the spits are always found in sets of six, seven or eight pieces; their length was over a metre,—the longest, 1.40 m.; their tops were broad, flattened by a hammer, and pierced with a hole. All were fastened together in sets by a ring passing through the hole, and by four or five movable bands or slides at suitable intervals. He also mentions eight others of the same form, found in the Gallic cemetery of St. Quirino, rusted together; their tops were 'traversed by a common axis,' and their length was 1.10 m.; with them were five kitchen knives, 0.36 to 0.39 m. in length. . . . Commenting on the iron spits exhumed, M. Déchelette says:

The religious emblems of the early bronze examples have disappeared, but this is not surprising, for spits of this metal [iron] came into use two or three centuries later than the preceding. Serving as they did both for domestic purposes and as a means of exchange, it is evident that they would not long retain elaborate decoration. A drachm of spits intended for circulation would necessarily be simplified. The use of iron in place of bronze would also add to the difficulty of reproducing the ancient symbols.

Although kitchen knives are found buried with the spits, the number of slides on the sets of the latter shows that they were rarely intended to be used for cooking, since

any rusting would make it difficult to separate them.¹ The sets used as currency represented a fixed value and were seldom taken apart. The heptoboloi and octoboloi circulating with them, as well as the single unperforated spits of which we note examples later, served to "make change" without breaking bundles.

From Cisalpine Gaul the iron drachm passed into Transalpine Gaul by the great trade route up the valley of the Rhone. In proof of this we have many finds, even now not generally known or understood, chief among which is a fine example, exceptionally preserved, exhumed on the banks of the Saone at Châlons. . . . The importance of the Aeduan city Cabillonum (modern Châlons) in the Celtic-Roman epoch is well known, for it was on the great traffic highway uniting Northern and Eastern Gaul with Provence and Italy. Here the Romans established the residence of the "Prefect of the Arar fleet," after the conquest, because its location made it the principal business centre. At the Celtic epoch it was unquestionably the chief point where the Aeduans collected the river tolls exacted on all merchandise passing up or down the Saone, which separated them from the Sequani,—a custom which caused constant disputes between the two tribes, "each of whom," says Strabo, "claimed the control of the Arar, and the right to levy duties from those sailing upon it."

About 1869-70, during excavations for building a bridge at Châlons, there was found, five or six metres beneath the later alluvial deposits, the piling of an ancient dock; the discovery passed almost unnoticed, except by a brief item in a local paper, which mentioned that a large number of amphorae points, estimated at about 24,000, and the remains of nearly as many more vases, with iron swords, javelins and fetters, were found in the debris, showing the commercial importance of the city as a distributing point for Southern wines, etc. Fortunately M. Millon, an eminent archaeologist, chanced to be in the neighborhood, and recognized the value of the find before its dispersion. Among the objects was a bundle of iron rods of precisely the same type as those of Montefortino, and in excellent preservation except for a rusty deposit on its upper part; it contained seven quadrangular spits, slightly over a metre in length, and was complete save that two or three slides were lacking; its weight was 2.90 k., and reckoning 200 grammes for the handle and three remaining slides, the average of the spits would be about 385 gr. Comparing these with the Rouen drachm, it would appear that the weight corresponds to that of the *octussis* rather than the *decussis*; but it is impossible to be as exact as if the rods had been of bronze, not rusted, and we do not know the relative value of the two metals at that period. It is interesting to note how little these seven spits differ in average weight from those found in the Heraion at Argos, described by Svoronos.

The Millon collection contains a single spit of the same model, but of only half the weight of those described, which Déchelette believes was used for purchases of small value. Next perhaps in importance to the discoveries at Châlons, is one made in the famous burial-place at Somme-Bionne (Marne) where similar spits, which Morel thought were darts, were found beside a warrior, who must have died before the capture of Rome by the Gauls, proving that that people had received them from Italy before the Cisalpine conquest, and, as was their custom, had copied them. Still another burial-place in Bavaria shows the wide diffusion of spits of the Etruscan or Greco-Etruscan type in Celtic countries, adding further proof that their introduc-

¹ It is difficult to explain Plutarch's story that the iron used for Spartan money was first heated and then thrown into vinegar, to make it valueless for other purposes; but it seems to accord with my theory that in the closing period of their circulation the drachm-spits were no longer intended for use in the kitchen.

tion began before that conquest:—for in 1901 a tumulus was opened at Beilngries, in which spits had been placed near the feet of a body, with many other objects of bronze and iron; beside the skeleton were a large number of bones of animals. Space forbids mention of other similar discoveries cited by M. Déchelette.

When the first silver coins were struck in Rome (about 269 B. C.) spits probably ceased to be used as money in Italy, and about the same time also in the countries north of the Alps, because of the wide diffusion of Gallic coinage, although Caesar¹ tells us that the primitive iron standards were still retained by the Bretons. . . . The iron spit money found in Punic Spain, assigned to the Seventh century B. C., also shows clearly the influence of Tuscan models; the spits are not, as some archaeologists have supposed, original products of Iberian industry, but are really barbaric copies of the Italian styles. Instances might be cited to prove that spits were used as money in Portugal also, examples of which may be seen in the Museum at Evora; these correspond in form and weight to the bronze spits of Etruria; here also they probably continued to be used for a time after coins had been struck.

CHARON'S OBOLUS.

I close this paper with a conjecture as to the origin of a funeral rite frequently mentioned by ancient writers. The iron oboloi found in Etruscan tombs will no doubt remind the reader of the coined obolus buried with the dead, to pay the fee for his ferryage across the Styx or the Acheron, in the infernal regions. The spit-obolus was used in burials very much earlier than the coined obolus. In the later classic period it was Charon, "the old ferryman," who received this modest perquisite, but he is not mentioned in the Homeric and Hesiodic poems, and notwithstanding his fame, belongs to the later Greco-Latin funerary myths. That there should have been such a complete change in the significance assigned to the obolus, while the rite itself remained, is not surprising when we remember the great mutations about the same period in the popular creeds concerning the under-world. The idea of a common home for all the departed had but a very vague hold on the most ancient Greek authors. It would even seem that the conception of a region of the dead—under ground but not identical with the grave—was no part of the primitive faith of Greco-Latin peoples.²

"The burial rites," says Fustel de Coulanges, "are evidently not in accord with those creeds—certain proof that when those rites were established, men no longer believed in Tartarus and the Elysian fields. In the earliest times the ancients thought that humanity retained life in the tomb, and that the soul was not separated from the body, but remained with it in the ground where its bones had been interred. . . . The dead man, in his final abode, ate and drank as when living. His thirst was appeased by libations of wine, and food was buried with him. In front of the tomb among the Greeks, a place was prepared to slay a victim and to cook its flesh. The Roman tombs had a similar *culina*, a sort of kitchen of a peculiar kind, for the sole use of the departed."³

¹ *De Bello Gallico*, V: 12, §4.

² Has M. Déchelette overlooked for the moment Homer's graphic story of the "house of powerful Hades and dread Persephone" (*Odyssey*, XI), or

does he mean to include "barbarians" among "all the departed"? See editorial note at the close of this paper.—ED.

³ *Le Cité antique*, pp. 12, 13.

The rite of Charon's obolus has one remarkable peculiarity, hitherto, I believe, unexplained. It was in the *mouth*, not the *hand* of the dead, that the obolus, and later the *danake*¹ was placed. Does not this fact, of itself, show very clearly the origin of the myth, when we remember that the primitive obolus and all the other objects deposited in the tomb were not offerings to the divinities of the under-world, but were for the use of the dead man himself, and indispensable to his future existence? "The man who dies without leaving a son," says Lucian,² "receives no offerings, and is in danger of perpetual hunger." The poor man, who, like Epaminondas, had not taken the precaution to lay aside at least an obolus, was in the same predicament.

Nothing was more common, in fact, in ancient burials, than the deposit of provisions and vases for liquids within reach of the departed, and often indeed close to his lips.³ We may therefore admit that there was a time when the spit-obolus, either with or without food, was placed in the grave near the mouth of the dead. When the spit began to circulate as a standard of value, it continued to retain its traditional place in the sepulchre, but men began to give various explanations of the meaning of the rite, some thinking it a kind of money which had the same value in the under-world as on earth. At the same time the legends relating to the crossing of the rivers of Hades had their origin; the obolus, a ferryman's fee for such service on earth, was regarded as the due expected by the grim old Charon. When once this myth became the popular belief, the coined obolus, on its appearance, was generally substituted for the spit, and virtually took its place between the dead man's lips.⁴ In the classic period this localization of the deposit of the piece of money—the reason for which no one understood—could hardly fail of faithful observance, because of its very singularity. Writers occasionally mention the custom, but in fact the obolus is most frequently found in or near the hand of the dead.⁵

In some Gallic sepultures of an early period, small coins have been discovered, the presence of which may well be attributed to a similar belief. In one of the tombs at Vevey, Switzerland, a little silver coin was buried near the right hand of the skeleton of a woman, which proved to be an obolus from Massilia. We know that among the Celts as well as in Greece and Italy, the deposit of iron obelisks (spits) preceded that of the silver obolus, and here again we see how great an influence classic civilization had upon the customs of the Gauls.

¹ On Charon's obolus, and its equivalent, especially the *danake*, see Babelon, *Traité des Monnaies*, as cited, I: 1, col. 515.

² Lucian, *De Luctu*, 9. [Lucian was ever a scoffer at popular beliefs, and doubtless had many followers, but his keen satire, though written centuries after the invention of coinage, shows that the early belief in the physical needs of the departed still lingered: the fact that the obolus is "most frequently found in or near the *hand* (not the *mouth*) of the dead," as M. Déchelette tells us below, may indicate not only that the coin, wherever placed, was to *purchase* food, and was thus a substitute for the spit to *cook* it,—virtually answering the same purpose—but also that the Charon myth never altogether displaced the older belief.—ED.]

³ In exploring a Gallo-Roman cemetery at Rodumna

(Roanne), I myself found a skeleton, the teeth of which pressed the rim of a drinking vessel: on the glazing one could still see traces of a sort of corrosion, due to the decomposition of the lips of the person interred. See my *Catalogue du Musée municipal de Roanne*, p. 108, No. 731.

⁴ Diodorus Siculus attributes the rite to an Egyptian origin, but he forgets, says Babelon, that the Egyptians had no coinage.

⁵ Maury, in *Religions de la Grèce antique*, II: p. 153, mentions that skeletons have been found in Greece having a coin between their teeth, and the act of placing an obolus in the mouth of the dead is figured on a sarcophagus found in the Villa Albani. Aristophanes (*Frogs*, 140 and 270) is said to be the first Greek author who alludes to the custom.

[While Homer mentions the infernal rivers, the Styx and the Acheron, which encircle "the mouldering house of Hades," he says nothing of the mode by which they were crossed. They seem to have offered no obstacle to the spirits of "the strengthless dead" who crowded around Odysseus when he went thither to consult Teiresias (*Odyssey*, X: 490 *et seq.*). It was the lack of *burial*, rather than of any trivial fee, which the shades of Elpenor (*Ibid.*, XI: 73 *et seq.*) and Patroclus (*Iliad*, XXIII: 71 *et seq.*) bewailed, as exposing them to the anger of the gods, and which prevented them from mingling with the phantoms of their earthly companions. It was the "due of fire after his death, that his body might not be left for the Achaian dogs to devour," that Hector besought and Achilles refused (*Ibid.*, XXII: 338 *et seq.*). The only approximate parallel between the Homeric ideal of the future life, and the later provision for the hunger of the dead, as indicated by the burial with them of the spit and cup, seems to be that singular thirst manifested by the spirits from Erebus who came in troops to the sacrifice by Odysseus, described in the eleventh book of the *Odyssey*. Notwithstanding he was but a spectre, the seer Teiresias needed to drink of the blood poured out by his visitor, before he might reveal the future (*Odyssey*, XI: 96). And finally it was Hermes who conducted the ghosts of Penelope's slaughtered suitors to "the fields of asphodel." (*Ibid.*, XXIV: 1, 99.) Charon and his fee were evidently very late additions to the ancient creeds.—ED.]

PORTRAIT PLAQUETTE OF M. ALPHONSE DE WITTE.

DURING the present year M. Alphonse De Witte, Vice-President of the *Société royale de Numismatique* of Belgium, completes a quarter-century's term of service in the Board of Government of that body. Throughout this long period he has done most efficient work in promoting its prosperity, and for a number of years has been one of the editors of its *Revue*, giving liberally of his time to the advancement of numismatics, in which he is an acknowledged authority. A frequent contributor to the leading periodicals devoted to the science, his name has long been familiar to the readers of the *Journal*. Among his published works, his *Histoire monétaire du Brabant*, issued in 1899, leaves little to be added by future students. M. De Witte has done much toward the advancement of medallic art in Belgium and Holland, having taken an active share in the foundation of the *Société hollandaise-belge des Amis de la Médaille d'art*, and is now President of the Belgian section of that body. He is also an Honorary Member of the *Société Française de Numismatique*, of Paris.

To his zeal and devotion was largely due the success of the recent International Congress of Numismatics and Contemporaneous Medallic Art, held at Brussels in 1911, and it is with much pleasure that we learn that members of the *Société royale* have commissioned M. Godefroid Devreese to engrave the dies for a plaque commemorative of his long and faithful service. This is to bear a portrait of M. De Witte, and will be presented to him on the coming anniversary. Impressions in bronze (10 francs) or silver (25 francs), can now be ordered of the Secretary of the Belgian Society, M. Victor Tourneur, Ph. D., whose address is 98, rue Defacqz, a St.-Gilles, Bruxelles.

Judging from the examples of Portrait Medals produced during the last year or two by this eminent artist, which have received very high praise from eminent numismatists abroad, the work could not have been intrusted to more skillful hands. We note especially his Medal commemorative of the accession of the present King and Queen of Belgium (Albert and Elizabeth) with their busts to left, which is to be sold for the benefit of the Belgian Sanatorium for Tuberculous Women.

M.

PRIVATE GOLD COINAGE.¹

VI.

(Continued from Vol. XLVI, p. 21.)

PATTERN AND EXPERIMENTAL PIECES OF CALIFORNIA, 1849-1856.

OF equal interest to the gold struck by the different minting firms in California for use as coins, are the Pattern pieces of various denominations, made from dies evidently intended for the same purpose, but which for one reason or another were abandoned. Nearly all these Pattern dies were made in the East, and it is usually from some Eastern source that specimens come to notice. As related by an old California pioneer, in 1849 many of the Companies organized to seek fortune in the California gold-fields carried with them coining apparatus of some kind. In a few instances heavy machinery was taken along, as in the case of the Cincinnati Mining and Trading Company, while in others it is probable that the coinage equipment consisted mainly of a few sets of dies; but it is not likely that much of this, beyond the dies, reached California by the overland route.

In the statement of a member of the Cincinnati Company he says that when only three hundred miles west of Independence, Mo., they were beginning to lighten their wagons of the weightier articles, and were considering the abandonment of their "heavy coining apparatus." At this point the Company had little more than started on their long and trying journey. Two huge mountain ranges were yet to be crossed, with many miles of intervening desert, and it is very safe to conjecture that their machinery was abandoned long before they reached the Rocky Mountains. When travel had become so difficult that such important articles of food as bacon and beans were becoming a burden to many of the overlanders, it is easy to guess the fate of the "heavy apparatus." Along the overland trail from Fort Laramie, and on through the South Pass, the route in 1849 was strewn with thousands of dollars' worth of abandoned property of every sort — food, furniture, stoves, hard-

ware and tools of all kinds, wagons, etc., and many of the adventurers, on account of the exhaustion of their draught cattle, made up packs and continued their way on foot.

In the case of the Massachusetts and California Company it is not probable that their coinage exceeded the striking of a few trial pieces in gold, silver, and copper. As this Company was transported to California by ship, their coining apparatus no doubt reached its destination. All their silver and copper trial pieces, it is thought, were made in the East, though the few known gold pieces may have been struck in California.

The existence of a Five Dollar die bearing the United States Assay Office design indicates the intention of that establishment to issue a piece of that denomination. This had evidently been engraved in 1851, at the time the Ten and Twenty Dollar dies were made, which show an overstruck date, as coins from the latter dies were not struck until 1852. It was expected by the Assay contractors that the Secretary of the Treasury would give authority to strike all the regular denominations of United States gold. Of course, as will be seen by reference to the letter allowing the Assay Office to coin lower values than Fifty Dollars, the authority clearly specified only the Ten and Twenty Dollar pieces, and the plan of making Five Dollar pieces had to be given up.

The Pattern pieces bearing the name of T. Dubosq are of considerable interest. It is not unlikely that impressions in gold from these dies may even yet make their appearance. Mr. Dubosq reached California in time to engage in striking private coins in 1849, and it is difficult to see why he did not do so. There was then a great need of such pieces; he was prominent in business affairs in San Francisco, irrespective of his coinage operations, and enjoyed a high reputation.

The interesting design for a Twenty Dollar piece bearing the stamp of Wass, Molitor & Co., suggests that we may yet see this in gold. However, up to the present time, Mr. Granberg's specimen, of which an illustration (92) is shown, is the only example from the dies known to be extant.

The Twenty Dollar piece in copper bearing the stamp of the Cincinnati Mining and Trading Company is the only one known to exist; the Company evidently intended to issue a piece of that denomination, and it may be that this was the very first die made. It certainly antedated the Mormon Twenty Dollar piece by some time, and was far ahead of the United States Double Eagle, which was not made until the latter part of 1849. It is related that this piece was obtained from a miner in Salt Lake City, and that he had carried it for a long time as a pocket piece. It may have been brought to the Mormon capital by one of the members of the Company.

The Model Half Eagle, Quarter Eagle, gold Dollar, and gold Half Dollar series is one of which nothing is known: as the design indicates, they were undoubtedly intended as Patterns for private coinage. It is not hard to understand why they were not adopted. Very little need was felt for gold of the smaller values, and extremely few such pieces were issued by the private mints. Coinage was confined to denominations of Five Dollars and above, and specimens of lower value are nearly all trial pieces or Patterns, which were never issued for regular circulation. Facilities were so limited that these lower values could not have been made to advantage. A large profit was necessary, for without it the private coiners could not have operated successfully, owing to the extremely high cost of labor and materials in 1849 and the early 'fifties.

THEODORE DUBOSQ.

57—*Five Dollars.* *Obverse*, T. DUBOSQ across the field, encircled by thirteen stars. At the bottom is the date, 1849 *Reverse*, An eagle of the usual type, with shield; around the border S M V CALIFORNIA GOLD FIVE DOL.

This piece is described by Dr. R. Coulton Davis, but there is no record obtainable showing where a specimen has been sold. In Mr. Groh's book of "Rubbings" in the library of The American Numismatic Society, is to be seen one of this coin. As Dubosq was a jeweler by profession, it is supposed that he engraved the dies for all his coins.

58—*Two and a Half Dollars.* *Obverse*, T. DUBOSQ across the field, encircled by thirteen stars. The date 1849 below. *Reverse*, An eagle similar to that on 57, bearing a shield, surrounded at the border by S M V CALIFORNIA GOLD and 2½ DOL. below. Copper.

A fine specimen, supposed to be unique, was offered at the Bushnell sale. J. Schulman, of Amsterdam, recently sold an example of the same design in copper, in fine condition. Another fine specimen, in copper, was offered at the Levick 1884 sale. Through the kindness of H. O. Granberg I am able to show an illustration of this interesting Pattern, which I believe is the Schulman piece.

MASSACHUSETTS AND CALIFORNIA COMPANY.

59—*Five Dollars.* *Obverse*, On a shield supported by a bear and stag, a cowboy; a crest above as on 37; ALTA on a ribbon below. Around the border, thirteen stars. *Reverse*, An open olive wreath inclosing FIVE D. in two lines. Around the border, MASSACHUSETTS & CALIFORNIA CO. and below is the date 1849. Silver and copper.

A fine specimen in silver brought \$4.25 at the Parmelee sale; another in silver brought \$3.10 at the Levick sale; one in copper brought \$1.55 at the R. C. Davis sale, and another in silver sold for \$72.50 at the Zabriskie sale. This is the design of the two specimens known in gold. A fine example in silver is owned by Fred. T. Huddart of San Francisco; it is from exactly the same die as 37.

60—*Five Dollars.* *Obverse*, Same design as the foregoing. *Reverse*, The same as last, but the wreath is closed at the top. Copper.

A very fine examples brought \$2.19 at the Levick sale. The only located specimen of this variety is in the collection of Malcolm N. Jackson, of Boston, who kindly loaned it to be illustrated.

61 — *Five Dollars.* *Obverse*, Similar to the foregoing, but from an entirely different die. The workmanship is not so good, and the design somewhat rude. The border is broader. *Reverse*, A small wreath of leaves in the centre, surrounded by a circle of thirteen stars. There is no denomination. Around the border the same inscription as on 59 and 60. Copper.

An impression brought \$2.30 at the Levick sale. A specimen of the same design, somewhat mutilated, also in copper, brought \$3.11 at the Zabriskie sale. In an issue of the *Titusville Circular* a Massachusetts & California Five Dollar piece in brass is mentioned, but which of the three above described does not appear.

MINERS' BANK.

62 — *Ten Dollars.* *Obverse*, MINERS . BANK . above, ★ TEN . D. ★ on the field, and SAN FRANCISCO . below, as shown on the Ten Dollar gold piece of the Miners' Bank issue (38). *Reverse*, Eagle as on that, with CALIFORNIA above, and thirteen stars around the border below. Copper.

A good specimen brought \$1.75 at the Parmelee sale; another sold for \$3 at the Levick 1884 sale; still another, in fine condition, brought \$2 at the Scott Stamp & Coin Co. sale, June 26-27, 1893. This seems to have been struck from the regular dies of the Miners' Bank Ten Dollar piece, already illustrated.

PACIFIC COMPANY.

63 — *Two and a Half Dollars.* *Obverse and Reverse*, In all respects the same as those of the Pacific Company coins which were struck for circulation (27 and 28), except that the reverse reads 2½ DOLLARS. Silver.

There are only two known specimens of this variety. One is in the collection of H. O. Granberg, which he has kindly loaned for illustration. The other is in the collection of Virgil M. Brand.

64 — *Dollar.* *Obverse and Reverse*, The same designs as those of the other Pacific Company coins. Tin.

There is only one example known in tin, which, in good condition, brought \$1.05 at the Levick sale.

65 — *Dollar.* *Obverse*, The same as that of the Pacific Company Dollar (29), with 1 DOLLAR below the Liberty cap. *Reverse*, Blank. Struck over a Spanish Real of 1776. Good condition, and unique. Silver.

This piece is described in the Catalogue of the sale of Ed. Frossard's collection, 1884. At that time it was thought to have been a private token of the period 1834-1838, and it brought \$9.10. It is now in the collection of H. O. Granberg.

COLUMBUS COMPANY.

66 — *Five Dollars.* *Obverse*, COLUMBUS 1849 COMPANY. *Reverse*, CALIFORNIA GOLD. DOL'S. Within a double circle in the centre is the Arabic figure 5. Silver, unique, and copper.

A specimen in silver, with *Feb. 15* scratched in the field, but otherwise in fine condition, brought \$3.25 at the Parmelee sale. A fine example in copper brought \$2.75 at the Levick sale.

Nothing whatever is known concerning the origin of this piece, nor where either of these examples now are. Judging by the name, it is not unlikely that this was struck by a Company organized at Columbus, Ohio. It was customary for the Companies of adventurers preparing to go to California in 1849 to give their organization the name of their home city.

MORAN & CLARK.

67 — *Ten Dollars.* *Obverse*, Inscription in five lines, CALIFORNIA GOLD above and MORAN & CLARK below WARRANTED | ★ 10 DOLL'S. ★ | MINT VAL^N *Reverse*, SAN FRANCISCO above, and CALIFORNIA below, around the border. Within a wreath 11 DWT. 8 GR | 20½ CARAT in two lines, above and beneath which is a star. A five-pointed star on each side the wreath divides the legend. Copper.

It is not supposed that there are many trial pieces of this design. One in the Levick sale of May 26–29, 1884, brought \$2.60; another, in copper, brought 62 cents at the Leonard & Co. sale at Boston, May 14, 1862, and still another impression sold for a few dollars at the recent Ulex sale in Frankfort, Germany. The latest specimen to be offered in this city was the one with milled edge, struck in copper, sold by Low at the Comstock sale, Sept. 16, 1903, for \$5.25. A fine example brought about \$80 in a recent sale by Henry Chapman.

While the Pattern piece bearing this stamp shows the imprint of San Francisco, the firm of Moran & Clark was located at Sacramento. The piece was probably issued late in 1849 or in 1850. A reference to the firm has been found in the "New York Spirit of the Times," of Jan. 18, 1851, where a correspondent from Sacramento, in a letter dated Nov. 28, 1850, says: "Mr. Dan Moran, formerly of Moran & Clark, of this city, is, I believe, in New York, doing there a large auction business." Mr. Huddart has kindly loaned his specimen to be illustrated.

CINCINNATI MINING AND TRADING COMPANY.

68 — *Twenty Dollars.* *Obverse* and *Reverse*, The same designs as the other pieces of the Company (30 and 31), but the reverse reads TWENTY DOLLARS. In diameter it is somewhat smaller than the regular Double Eagle. Copper, unique.

This is the only known specimen of the denomination in any metal, and is in somewhat worn condition, having been carried as a pocket-piece for a long time, the owner

not being aware of its value. It brought \$125 at an Elder sale two or three years ago. It is now in the collection of H. O. Granberg. Thanks are herewith expressed to that gentleman for loaning it for our illustration.

69—*Five Dollars.* *Obverse* and *Reverse*, As 31; a trial-piece from the regular dies of the denomination. Copper, unique. In the collection of H. O. Granberg. Illustrated with the gold (31).

SAN FRANCISCO STANDARD MINT.

70—*Five Dollars.* *Obverse*, 5 DOLLARS SAN FRANCISCO STANDARD MINT. 22 CARAT FINE. *Reverse*, Plain. Tin.

A proof in tin brought \$1.60 at the McCoy sale of May 17-21, 1864. This is the only specimen that can be located.

MEYERS & COMPANY.

71—*Obverse*, WARRANTED $\frac{1}{4}$ OZ. TROY. U. S. STANDARD. No reverse. Struck over a United States Cent. Sold for \$1.60 at the 1884 Levick sale.

There is no denominational value on this piece, which from its inscription was intended simply as a stamp for one-half an ounce of gold; as the market rate for gold was \$16 an ounce, this was equivalent to about a Half Doubloon.

J. S. ORMSBY & COMPANY.

72—*Ten Dollars.* *Obverse*, UNITED STATES OF AMERICA. CAL. and .J .S .O in the field. *Reverse*, A circle of thirty-one stars around the border. In the field, in two lines, 10 | DOLLS. Silver.

This was struck from the regular dies of the Ormsby Ten Dollar piece (32). Said to be in the collection of Virgil M. Brand. At the Scott Stamp & Coin Co.'s sale of the Herman collection, June 26-27, 1893, a J. S. O. of the usual design, struck over a silver Two-real piece of Ferdinand VII, of the Mexico mint, dated 1815, size $27\frac{1}{2}$, in good condition, brought \$4. At the Cleveland sale, by Low, of Feb. 28, 1903, the J. S. O. piece, struck on a Spanish Two-real of Ferdinand VII, in good condition, brought \$12.75. Evidently these last two are identical. The one in the Brand collection is supposed to be unique. This was illustrated under the gold (32).

J. H. BOWIE.

73—*One Dollar.* *Obverse*, J. H. BOWIE above, 1 on the field, and DOL. below. At the left is 24 G and at the right 24 C. *Reverse*, A pine tree, with CAL. above and GOLD below. The border and edge are plain.

This piece, struck in copper, is unique so far as known, and nothing has been learned concerning its history. This specimen brought \$35 at the Stickney sale. By the courtesy of Malcolm H. Jackson of Boston, the present owner of this rarity, we are enabled to give an illustration of the piece.

PELICAN COMPANY.

74 — *Two and a Half Dollars.* *Obverse*, PELICAN CO. 1849 with a large star in the centre of the field. *Reverse*, CALIFORNIA 2½ DOLLS. around the border. In the field, 21 CARATS. Brass.

This piece, so far as known, is unique. It was disposed of at the Zabriskie sale in 1909, for \$105. Nothing has been learned of its history, and it is the only one of the design in any metal which has as yet been discovered.

CALIFORNIA GOLD MINES.

75 — *Twenty Dollars* (?) *Obverse*, Two bears embracing; around the border is the legend, CALIFORNIA GOLD MINES A. D. 1850 Below the ground under the right-hand bear is a tiny L. *Reverse*, An eagle with wings displayed, on a wheat sheaf; five five-pointed stars above. Around the border CALIFORNIA GOLD MINES 1850. Struck in brass and copper. Milled edge.

This piece, which from the splendid manner in which the dies were engraved would lead us to suppose that it had been intended for a Pattern private coinage, is thought to have been the work of William Lemme, a San Francisco engraver of the pioneer days. A. Reimers, the San Francisco collector, however, inclines to the belief that as it has no value stated upon it, it was one of the counters so extensively used in California gambling houses, and properly belongs to the same class of tokens as the flag and steamship counters. Others, because of its style of workmanship, have thought it was produced some time after the pioneer days, but this opinion is not supported by facts. Farran Zerbe has an impression which he obtained from an old lady in Cumberland, Md. It came to her from her brother, a "Forty-niner," and she stated it had been in the family for fifty years. A specimen, gilt proof, brought \$3.60 at the Levick 1884 sale. They are rather rare. Thanks are extended to Elliott Smith, of New York, for his kindness in loaning his example for illustration.

SAN FRANCISCO, STATE OF CALIFORNIA.

76 — *Twenty Dollars.* *Obverse*, Head of Liberty surrounded by thirteen stars; LIBERTY on the coronet; date, 1851 below. *Reverse*, The arms of California: a seated female figure, gazing through the "Golden Gate," a bear at her feet, and a miner in the background. Below the figure, in the exergue, is the denomination, 20 D. Legend, SAN FRANCISCO STATE OF CALIFORNIA Silver, copper and white metal.

Through the kindness of Fred. T. Huddart, who has loaned his complete set of the Patterns described under 76 to 79 inclusive, illustrations of the entire series are shown on the plates.

77 — *Ten Dollars.* *Obverse and Reverse*, As those of the Twenty Dollar piece, differing only in the exergue inscription, showing the denomination. Silver, copper and white metal.

78—*Five Dollars.* *Obverse*, Head of Liberty. Not an imitation of the United States Five Dollar head, but similar, with LIBERTY on the coronet, and thirteen stars around the border. *Reverse*, An open wreath inclosing, in two lines, 5 | DOLLARS. The date 1851 below the wreath and near the edge. Around the border SAN FRANCISCO STATE OF CALIFORNIA. Silver, copper and white metal.

79—*Two and a Half Dollars.* *Obverse and Reverse*, Same as those of the Five Dollar piece, except that the wreath on the reverse incloses 2½ | DOLLARS in two lines. Silver, copper and white metal.

It has been said that this series of Patterns was struck at the San Francisco Mint, but their date contradicts the statement, for the Branch Mint did not begin operations until 1854, and Pattern coins are never struck at Branch Mints, but exclusively at the parent establishment at Philadelphia. Wherever they were struck, they are the most interesting set of Patterns and have the most artistic design of any of the California private issues.

AUGUSTUS HUMBERT.

1851.

80—*Fifty Dollars.* *Obverse*, An eagle standing on a rock, holding the United States shield and having a ribbon in his beak. Above is a scroll bearing the inscription, THOUS. Around the central device and near the edge is UNITED STATES OF AMERICA D C DWT GRS. The edge is lettered AUGUSTUS HUMBERT ASSAYER OF GOLD CALIFORNIA. UNITED STATES 1851 WRIGHT FEC. *Reverse*, Engine-turned, or lathe-work. Octagonal.

One struck in bronze, and said to be unique, brought \$12 at the Bnshnell sale.

It is quite probable that the dies for this and also 81 and 82 were cut by the well-known engraver, C. C. Wright, of New York City.

81—*Fifty Dollars.* *Obverse and Reverse*, Similar to those of the last-mentioned Fifty Dollar piece, but the edge is not lettered. Octagonal.

This was struck in bronze, and, like the preceding, is thought to be unique; it brought \$12.50 at the Bushnell sale.

At the Woodward sale of March 20-25, 1885, a "unique trial impression from the dies of the California octagon Fifty Dollar piece—Reverse, Lathe work"—was sold. The description is too meagre to enable us to identify this Pattern with any one of several pieces which might have been struck later from the dies.

82—*Ten Dollars.* *Obverse*, As the first issue of the Ten Dollar piece (18) struck by Humbert; an eagle with head to right, wings displayed, his right talon grasping the National shield, and his left holding an olive branch. Above the eagle a ribbon-scroll on which is the fineness, 884 THOUS.; UNITED STATES OF AMERICA above and TEN DOLS. below. *Reverse*, Engine-turned, the field divided by a label or tablet, on which, in four lines, the words, AUGUSTUS HUMBERT | UNITED STATES ASSAYER | OF GOLD CALIFORNIA | 1852.

This was struck in bronze, and brought \$11 at the Bushnell sale.

1852.

83—*Fifty Dollars.* *Obverse,* Within a beaded circle an eagle holding a ribbon in his beak, a shield in his right and an olive branch in his left talon. Above the eagle, on a label with the ends turned outward, 900 THOUS. Surrounding the device, UNITED STATES OF AMERICA and at the bottom, FIFTY DOLLARS. Outside the circle, near the edge, UNITED STATES ASSAY OFFICE OF GOLD SAN FRANCISCO CALIFORNIA; the date 1852 at the bottom. *Reverse,* —? Octagonal, and very similar to 19.

This was undoubtedly a Pattern made by Albert Küner, and has his name in very small letters under the eagle. The dies were supposed to have been destroyed in the San Francisco fire, but the obverse was afterwards rescued from junk that had been taken to Los Angeles. Impressions of the obverse die on very thin silver and brass planchets were struck; it was also used on a silver spoon, and is still extant. It is supposed that it was intended to use with this obverse the usual engine-turned reverse device, but there is no known example showing both sides.

1853.

84—*Twenty Dollars.* *Obverse,* From the reverse of Humbert's regular Twenty Dollar piece of the year. *Reverse,* Blank. Lead, and unique.

Examples of this and the three following numbers are in the Joseph C. Mitchelson collection, in the Connecticut State Library, Hartford, Conn.

85—*Ten Dollars.* *Obverse,* Similar to the regular obverse of the denomination of the year. On a scroll, above the eagle, THOUS. *Reverse,* Blank. Lead, and unique.

86—*Ten Dollars.* *Obverse,* Similar to the regular reverse of the denomination of 1853, showing the engine-turned device. *Reverse,* Blank. Lead, and unique.

87—*Five Dollars.* *Obverse,* Similar to that of 85, and a similar scroll above the eagle, with THOUS. Around the border, UNITED STATES OF AMERICA FIVE D. *Reverse,* Blank. Lead, and unique.

These four pieces (84–87 inclusive), and also 88, 89 and 90, under Moffat & Co., following, are simply uniface trial impressions from single dies. The space before THOUS. on the dies, denoting fineness, was to have been filled with the proper figures later.

MOFFAT & CO.

88—*Ten Dollars.* *Obverse,* The head of Liberty, the same as that which appears on the other coins of Moffat & Company. Undated. *Reverse,* —?

89—*Ten Dollars.* *Obverse,* Eagle, similar to that on the reverses of the regular United States coins. Around the border, SAN FRANCISCO CALIFORNIA TEN D. *Reverse,* Blank. Lead, and unique.

In the Mitchelson collection, at Hartford. This was apparently intended to be used as the reverse of the foregoing obverse, 88, of which no impression in metal is known, the engraving being made from a plaster cast taken from the original die.

90—*Five Dollars.* *Obverse,* Similar to obverse of 89, but around the border, SAN FRANCISCO CALIFORNIA FIVE D. *Reverse,* Blank. Lead, and unique. In the Mitchelson collection.

The foregoing (83-90 inclusive) are all from dies which are now in the Philadelphia Mint cabinet. They possess a very interesting character, as they indicate it was the intention of the Assay Office to issue denominations which were never struck in gold, or at least are unknown in that metal. 84, 85 and 86 represent trial pieces from the regular dies that were adopted, and from which the coins of the year were struck, but 87 shows that dies had been prepared to strike coins of the denomination of Five Dollars, if permission had been granted by the Treasury Department; but so far as known, no coin of that denomination was struck in gold at the Assay Office. 89 and 90 are evidently impressions from dies for a private issue by Moffat & Co., and probably prepared some time in 1853, when the Twenty Dollar piece (26) bearing the stamp of Moffat & Co. was issued; the similarity of design would seem to show that that firm also intended to strike Five and Ten Dollar pieces at the same time, but no impressions in gold of either are known, and it is not believed that any were made. The history of these dies is not known, but it is probable that they were sent to Philadelphia from San Francisco in 1854, when the Assay Office became the San Francisco Branch of the United States Mint.

WASS, MOLITOR & CO.

91 — *Twenty Dollars.* *Obverse*, Small head of Liberty with W. M. & CO on the coronet, etc., as obverse of 51. *Reverse*, As reverse of 51. Copper.

This is a trial piece struck from the regular dies of the Wass, Molitor & Co.'s issue of the denomination in 1855. A specimen is said to be owned by W. W. Kaufmann, of Marquette, Mich.

92 — *Twenty Dollars.* *Obverse*, Large head of Liberty, as on the regular United States Double Eagle; W. M. & CO. on diadem; around the edge thirteen stars, and the date 1855 below. *Reverse*, An eagle with outstretched wings, shield on breast, a large olive branch in his right talon and three arrows in the left; above, on a label, the ends turned backward, 900 THOUS. Around the device, SAN FRANCISCO CALIFORNIA above, and TWENTY DOL. below. Reeded edge. Lead.

This design is distinctly different from the gold piece of the same denomination struck by Wass, Molitor & Co. (51), and the above is the only impression known in any metal. It is illustrated through the kindness of H. O. Granberg, its present owner.

KELLOGG & CO.

93 — *Fifty Dollars.* *Obverse*, Head of Liberty surrounded by thirteen stars; the date 1855 below. *Reverse*, An eagle with scroll, etc., and legend as on 54. Edge reeded. Copper.

This is a trial piece from the regular dies of the denomination as issued by Kellogg & Co. (54), which has already been illustrated. An example sold for \$8 at one of Low's sales in 1903. One in proof condition, bought by Henry Chapman for \$15, is said to be now in the collection of George H. Earle, of Philadelphia.

94 — *Twenty Dollars. Obverse and Reverse*, From the dies of one of the 1854 or 1855 pieces issued by Kellogg & Co. Copper.

An uncirculated specimen brought \$1.10 in the Parmelee sale, where the description given is not sufficiently complete to identify it certainly with either of the four Kellogg issues in gold of this denomination (52, 53, 55, 56). Its present ownership is unknown, and there is a possibility that this and that next described are the same.

95 — *Twenty Dollars. Obverse*, Head of Liberty to left, and one of the best of the various heads; on the coronet, KELLOGG & CO. Around the border thirteen stars. No date. *Reverse*, A close imitation of the regular United States Double Eagle, as on 52 and 53. Copper.

An uncirculated impression from these dies, struck in copper, brought \$17 in Elder's thirteenth sale in 1907. H. O. Granberg has a specimen of the piece, in very fine condition, which he has kindly loaned for illustration.

BLAKE & CO.

96 — *Twenty Dollars. Obverse*, Head of Liberty to the left, surrounded by thirteen stars; on the coronet, BLAKE & CO. Below is the date 1856. *Reverse*, An eagle similar to that on the regular United States Double Eagle, with a radiated cluster of stars above his head, the rays being somewhat thicker than on others similar. Around the edge, above, SACRAMENTO CALIFORNIA and below, TWENTY D. Milled edge. Brass and copper.

A specimen catalogued as struck in brass, gold-plated, and in fine condition, brought \$34 at the McCabe sale. Another, also fine, struck in copper, was bought by a Mr. Sherman for \$2.50, at the Woodward sale of December 10, 1866, and a fine impression in copper, probably the same piece, sold for \$1.75 at the Levick sale in 1864. So far as is now known, there are actually but two of these pieces, one of which is in the collection of Virgil M. Brand — that bought at the McCabe sale — and the other in that of Fred. T. Huddart, of San Francisco, which is in copper, and we are indebted to him for the opportunity to illustrate it.

This piece is of special interest as being the final effort of a contemplated renewal of private coinage in California. In 1856, owing to the limited operations of the San Francisco Branch Mint, and to the fact that not one of the private assay offices was making coins, the regular United States money became very scarce, and there was talk of a resumption of the issues of private bankers, which no doubt induced Blake & Co. to prepare the dies for a Twenty Dollar piece, from which this Pattern was struck.

Blake & Agnell conducted a gold-smelting and assaying plant at 52 J Street, between Second and Third Streets, Sacramento, in 1855. Later the firm was composed of Gorham Blake and W. R. Waters, and the name was changed to Blake & Co., under which title it was known from December 29, 1855, until some time in 1859, when Mr. Blake retired, and the business was continued by his partners as Waters & Co.

BALDWIN & CO.

1850.

97—*Ten Dollars. Obverse*, The figure of a mounted vaquero riding to right, with lasso. Below is the date 1850. Above is CALIFORNIA GOLD and below TEN DOLLARS. *Reverse*, An eagle with expanded wings; BALDWIN & CO at top between the tips of the wings, and SAN FRANCISCO below, with five stars on each side filling out the legend, as on 41. Various metals.

This trial piece, which undoubtedly was the work of Alfred Küner, follows closely the issue of the same denomination described under 41, but the dies, both of obverse and reverse, show a number of slight variations. On 41 the small s in DOLLARS lines with the bottom of the other letters, and is followed by a period; on this, the s is raised, to line with the top of the others; on the reverse of 41 the tip of the eagle's right wing extends to the edge of the piece; on this, it is not so long, and differs slightly in shape; a close examination shows other trifling differences. There have been restrikes, and it is said two impressions were taken in gold; the obverse die was also used to strike souvenir spoons before the great San Francisco fire.

1851.

98—*Ten Dollars. Obverse*, Head of Liberty to the left, surrounded by thirteen stars; BALDWIN & CO. on the coronet; the date 1851 below. *Reverse*, An eagle with expanded wings, its head to the left; a branch of olive in the right and three arrows in left talon. Around the border S. M. V. CALIFORNIA GOLD and the denomination, TEN D. below. Brass.

The only known example of this variety is that which was catalogued in the Leavitt sale, held January 9, 10, 1891. The dies are those used for 44.

H. SCHAEFFER.

99—*Five Dollars. Obverse*, Around the border at the top, H. SCHAEFFER and below, completing the circle, seven five-pointed stars; on the field, 5 over DOLLARS, the last line curving upward. *Reverse*, Inscription in four lines, the first and last curving to the border: CALIFORNIA GOLD | 134 GR | 21 | CARATS Struck on a large copper Cent dated 1841.

This trial piece, which presents an entirely new design for private gold coinage, links the private issues of North Carolina with those of California. It first came to notice when S. H. Chapman exhibited it at the meeting of The American Numismatic Society in March, 1912. It was then thought by the writer to have been an impression from the dies said by Prof. William E. Hidden to have been made by an employee of the Bechtler mint and taken to California in 1849, with the intention of striking private gold coins. Prof. Hidden, who has made a close study of the Bechtler coins, was shown the piece, and pronounced the name it bears to be that of Heinrich Schaeffer, who, he was informed, had made a series of dies and gone to California. He further said:—

This Mr. Schaeffer was "a witness and if necessary an executor" of the will of Alt Christoph Bechtler (who died in 1842). I learned at Rutherfordton from a son of Heinrich Schaeffer that his father had a set of dies made soon after the discovery of gold in California, and it was his intention to hasten there and begin a mintage business similar to that which had been so prosperous under the Bechtlers. This set must have been made as late as 1849 or 1850, and some half a dozen years after the death of both of the original Bechtlers (Christopher and his son Augustus). It follows that the old punches (of letters) were used for the Schaeffer dies, and the design shows a continuance of the Bechtler ideas. It seems, therefore, that we can look with confidence to further discoveries of specimens of the Schaeffer coinage.

THE "MODEL" SERIES.

100 — *Half-Eagle*. *Obverse*, Within an open wreath of olive is the inscription in three lines, MODEL | HALF | EAGLE At the border, above the wreath, CALIFORNIA and the date 1849 at the bottom. *Reverse*, An eagle with outspread wings, holding an olive branch and three arrows in his talons. Around the border are thirteen stars. Gold and brass.

We are indebted to H. O. Granberg, who owns the impression in gold, which is supposed to be unique, for the opportunity to illustrate this piece.

101 — *Quarter-Eagle*. *Obverse and Reverse*, Design same as the foregoing, with the exception of the denomination. Brass.

102 — *Dollar*. *Obverse and Reverse*, Design same as the foregoing, with the exception of the denomination. Brass.

103 — *Half-Dollar*. *Obverse and Reverse*, Design same as the foregoing, with the exception of the denomination. Brass.

MARKERS OR COUNTERS.

There are a number of tokens, dated 1847 and 1849, of the size of Ten and Twenty Dollar pieces, which bear the name of CALIFORNIA, on one side of which is a large United States flag; but these are not patterns for gold coinage. They are thought to have been chiefly used as gambling markers for their nominal amounts, at a time when the currency in California was chiefly gold dust. They are very much like the designs of the United States Eagle and Double Eagle of the period, and they are usually found combining the flag with an imitation of either the obverse or reverse of those coins, but no specimen which has embraced *both* obverse and reverse devices of the regular coinage has been seen, and it is doubtful if any were made. Such a piece would have been a very close imitation of the regular United States coins, and undoubtedly the Government would have stopped their issue. Almarin B. Paul, a California pioneer, stated that when he was in business in Sacramento in 1849 he was offered a keg of these markers or counters by an Eastern concern. It is quite probable that these and the following were all made in the East.

There is also a large token with the design of an eagle and steamship, and the name CALIFORNIA. No doubt this piece was used for a similar purpose to the preceding, and cannot be classified with those which were intended to circulate as money.

Still another counter associated with the California of pioneer days is a brass piece of about the size of a Five Dollar coin, showing a miner at work on one side and the head of Liberty on the other. This also was dated 1849, and is to be included among the markers or counters.

EDGAR H. ADAMS.

[To be continued.]

THE MEDALS, JETONS, AND TOKENS ILLUSTRATIVE OF THE SCIENCE OF MEDICINE.

(Continued from Vol. XLVI, p. 26.)

XII. AUSTRIA (continued). B. 3. *Medical Societies.* (Continued.)

Temesvar. Congress of Hungarian Physicians, 1843.

2741. *Obverse.* Crowned shield, supported by horses. Inscription: SZ. K. TEMESVAR. VAROSA. A. M. ORVOSOK. 'S. TERMESZET BUVAROK. (rosette) | AZ. 1843. EVI. AUG. S. KEBELEBEN. TARTOTT. GYULEKEZETE. EMLEKEUL. (rosette).

Reverse. Hygeia, holding a globe, rests upon a pillow against which leans the staff of Aesculapius. Before her a telescope, retort, books, and laurel branch. Legend: GAZDAGITVA — BOLDOGIT Exergue I. D. BOEHM F.

Bronze. 33. 51mm. In the Government and Boston collections.

Trieste. Sea Excursion of Physicians, 1907.¹

2742. *Obverse.* A tall, laureated female (Professional Wisdom), upon whose left shoulder a nude invalid leans, gazing from a pebbly shore at a steamship illumined by the setting sun. Exergue: ZUR ERINNERUNG AN DIE AERZTE FAHRT DER THALIA. | DES OESTERREICHISCHEN LOYD 6 - 8 OKTOBER 1907 Upon left edge, incused: HUIER

Reverse. Blank.

Bronze. Rectangular, curved above. 46 x 46. 73 x 73mm. *Monatsbl. der Num. Ges. in Wien*, Jan., 1909, p. 8. In the Boston collection, the gift of the late Ritter Carl von Ernst of Vienna.

Tyrnau. Congress of Hungarian Physicians, 1880.

2743. *Obverse.* —.

Reverse. —.

Bronze. 29. 45mm. J. Feijer Cat., Buda-Pest, June, 1896.

Vienna. Medico-Chirurgical Academy. See under Medical Colleges, Nos. 2644-51.

Do. Congress of German Naturalists and Physicians, 1832.

2744. *Obverse.* At left, Vienna seated, with mural crown. At right, an old man (the Danube) with oar, and at his side a boat, places a wreath upon her head. Between

¹ Upon the occasion of a three days' trip from dried physicians by the Austrian Lloyd. Trieste upon the steamship Thalia, given to three hun-

them a shield, bearing a cross. Upon base: BOEHM · F. Inscription: VINDOBONA — PHYSIOLOGIS Exergue: MENSE SEPTEMBRI | MDCCCXXXII

Reverse. Within two flowing branches: XAIBEIN (Welcome).

Silver, bronze, Berlin iron. 26. 40mm. Kluyskens Cat., p. 217, No. 3, and p. 218, No. 3; Duisburg, p. 237, No. 4; *Ibid.*, Cat., p. 71, No. 823. In the Government and Boston collections.

Do. XXXIId Congress, do., 1856.

2745. *Obverse.* In front of festoons of leaves and fruit, Vienna seated and facing, with mural crown, each hand resting upon a shield. Beneath: C. RADNITSKY Upon margin, at equi-distances, four medallions; above, with head to right, FRANZ IOS: I; at right, head to left, MARC: AVREL; below, bust to left, HEINR: J(A)S(E)M(IR)GOTT; at left, bust to right, LEOPOLD I. Inscription: DURCH MAJESTAET MIT — VEREINE KRAFT — DURCH ROEMER GROESSE — DURCH FROMMEN SINN | GLANZ UMGEBEN — IHR NEUES LEBEN — FEST BEGRUENDET — MITT GOTT VERBUENDET

Reverse. The goddess of Nature, irradiated, with twelve breasts. Above: DER | XXXII VERSAMMLUNG | DEUTSCHER | NATURFORSCHER U · AERZTE | DIE STADT WIEN | MDCCC—LVI (two vine leaves.) Upon edge, in arabesque, the following: A female head surmounted by star, a horse's head, bat, owl, tortoise, toad, fish, shell, bee, crystals, scorpion, fly, fish, beetle, serpent, lizard, eagle's head, and lion's head.

Bronze, white metal. 42. 68mm. Kluyskens Cat., p. 217, No. 14, and p. 218, No. 20; Duisburg, p. 238, No. 12; *Ibid.*, Cat., p. 72, No. 830. In the Government, Boston, and University of Pa. collections.

Do. Do. Do.

2746. *Obverse.* Bust, to left, three-quarters facing. Beneath: I. WEBER F. Inscription: ∞ LEOPOLD V · BUCH ∞ — GEB. 1774 GEST. 1853 | SEIN HERZ WAR SEINES — GEISTES WUERDIG

Reverse. Forest trees and a rocky cliff, upon which: DEM | ANDENKEN | AN | LEOPOLD V BUCH | GEWEINT | NACH DEM BESCHLUSE | AM 20 SEPT 1856 | IN DER XXXII VERSAM. | D · NATURF · U · AE · | WIEN | U MITW · ZAHLR · FREUNDE | D NATURW. IN DEUTSCHL | BELG · FRK : ENG · ITL

Silver, bronze, tin. 32. 50mm. Kluyskens Cat., p. 84, No. 84; Duisburg, p. 173, CCCCLXVIII; *Ibid.*, Cat., p. 49, No. 567. In the Government and Boston collections.

Do. LXVIth Congress, do. 1894. See under Germany: Helmholtz.

Do. International Hygienic Congress, 1880.

2747. *Obverse.* Bust, to right.

Reverse. —.

Bronze. 20. 34mm. Schumacher Cat., Berlin, Aug., 1894, No. 1119.

Do. Do. 1891.

2748. *Obverse.* Within curved quadrilateral, crowned double-headed eagle. No inscription.

Reverse. An irregular cartouche, crowned by laurel branches tied by ribbon and supported on left by Hygeia with serpent, and on right by Minerva with pencil, book and owl. Beneath the former: W P Upon the cartouche: INTERNATIONALE | AUSSTELLUNG | FUER | NAHRUNGS — MITTEL | UND | HAUSBEDARF | VOM | HYGIENISCHEN | STANDPUNKTE Exergue: 1891 WIEN 1891

Bronze, gilt. Oval. 32 x 38. 50 x 60mm. Edges chased. In the Boston collection.

- Do. First International Pharmaceutical Association, 1883.
 2749. *Obverse*. Between oak and laurel branches, with scrolled base, Hygeia seated, to left.
Reverse. ERSTE | INTERNATIONALE | PHARMACEUTISCHE | AUSSTELLUNG | WIEN ·
 1883.
 Gold. *Pharmaceutische Post*, Vienna, 14 Jan., 1894, fig.
 Do. International Dermatological Congress, 1892.
 2750. *Obverse*. Inscription: INTERNATIONALES DERMATOLOGEN CONGRESS WIEN
 1892
Reverse. Inscription: FUER HERVORRAGENDE LEISTUNGEN
 Communicated to me by Mr. J. D. Stiefel of Offenbach a./M., through Messrs. Schering & Glatz of New York.
Newport, R. I.

HORATIO R. STORER.

[To be continued.]

RECENT FRENCH MEDAL OF THE WAR OF 1870-71.

SOME time ago the French Government ordered a Medal to be struck in recognition of the services of those who defended the city of Paris, during its siege and capture by the Germans, in the war between France and Germany, in 1870-71, almost half a century having elapsed since the events it commemorates. These medals have recently been completed, and it would be interesting to know how many survivors are entitled to receive them. November 14, 1911, the "Excelsior," of Paris, published the following:—

The commemorative medal of 1870 is now a reality. The French citizens who defended their native country in 1870-1871 will receive a bronze medal. This medal bears on the obverse the head of Bellona helmeted, but without a laurel wreath. The reverse shows a trophy with military attributes, which designate the land and naval forces, with this inscription below:—AUX DÉFENSEURS DE LA PATRIE, 1870-1871 (To the Defenders of the country).

The workmanship is of charming simplicity and the composition harmonious. The medal is of bronze, thirty mm. in diameter, and the ribbon is intended to symbolize suffering and hope, being composed of nine black and green stripes alternating.

The first example of this medal was sent yesterday afternoon to M. Fallieres. The President of the Republic will present one to the King of Servia during his approaching visit to Paris.

The medal has no bar, with the exception of those awarded to the youth who volunteered when under age, which have a silver bar inscribed ENGAGÉ VOLONTAIRE. King Peter of Servia, who has been making a visit to Paris the last winter, was a volunteer in the French army in 1870, and on December 3 was presented with the first medal to be awarded, which he is said to have worn constantly while he remained in the city. The dies were engraved after

a design by the sculptor M. Georges Lemaire, and Mme. Dubois, of the Comic Opera, Paris, who had previously served as a model for the "Medaille du Maroc," posed for the figure of the goddess on the obverse. Impressions with and without the bar have been presented to The American Numismatic Society.

In addition to the medal awarded to the King of Servia (which was in gold) two other examples in the same metal were ordered to be struck, one of which was given to Lord Kitchener, of the British army, and the other to General the Baron Rappe, of Sweden. s.

UNIVERSITY OF CALIFORNIA MEDAL.

ON the first of June, 1911, the University of California instituted a competition for a new design for its medal established in 1871, to be annually awarded "to the most distinguished scholar of the graduating class." The requirements as to the design were as follows:—

The obverse of the medal may be of whatever design the individual competitor desires. The reverse should bear the following words: AWARDED BY THE UNIVERSITY OF CALIFORNIA TO (Insert name) THE MOST DISTINGUISHED STUDENT OF THE CLASS OF (Insert year). This inscription may be arranged in such a manner and with such accompanying decoration as the competitor may desire.

The first prize was awarded to Mr. Roger Noble Burnham, of Boston, who describes his design for the obverse as follows:—

The obverse shows the seated figure of a youthful student, physically well developed, as many of our University students are, or should be. On the back of the bench on which he is seated is the inscription THE SEAT AND CHANNELS OF OUR LEARNING. The 'seat of learning' is represented by a view of the Mining building, a home of instruction. In order to avoid a multiplicity of symbols I have grouped all the 'channels of learning' under three main heads:—the Natural Sciences, represented by the magnifying glass; Archaeology, by the Greek vase, and Literature, by the book. All knowledge which does not come through one of these material channels is the result of inspiration or contemplation suggested in the pose of the figure.

The medal has recently been completed, and the size is 67mm. The artist has presented an example in bronze to The American Numismatic Society, which is illustrated on plate 18. This "University Medal" was first conferred in 1871, and among the names of those who have received it are many of graduates who have achieved distinction as engineers, attorneys, physicians and merchants. On eight occasions it has been awarded to women. The first recipient of the new medal (struck in gold) was Lester Seward Ready, from Ventura, of the College of Mechanics. B.

PROCEEDINGS.

THE AMERICAN NUMISMATIC SOCIETY.

(The Proceedings at the Annual Meeting will be found in full at the close of this number. As bulletins in detail of the Proceedings at other Regular Meetings are now sent to the Members, only a condensed report of the February and March meetings will be given here.)

A REGULAR meeting of The American Numismatic Society was held on Saturday afternoon, February 17, 1912, Mr. William B. Osgood Field, one of the Governors, presiding.

The Council reported the re-election of the Governors, Treasurer, Secretary, and Corresponding Secretaries of last year, to serve as officers for the current year; that Messrs. Julius Guttag and Frederick W. Hotchkiss have been elected Associate Members, and regretfully announced the death on November 27, 1911, of Messrs. Anthyme Saint-Paul, of Paris, a Corresponding Member, elected March 15, 1881; of Charles Morris, of Chicago, on February 2, 1912, a Life Member since May 15, 1893; and of Edwin H. Weatherbee, of New York, on February 11, 1912, a Member since March 20, 1889.

The Director reported that the number of visitors to the Rooms in January was 518. Since the last meeting there had been received donations of 753 coins, 62 tokens, 240 medals, 10 specimens of paper money, and one decoration; of these Mr. J. Sanford Saltus has given the Society a collection of 221 medals of Joan of Arc, in gold, silver and copper, the work of French artists, seven British war medals, and one decoration; Mr. Edward T. Newell, 609 Roman coins; and Mr. A. Murray Young, 186 coins and tokens, and 10 specimens of paper money. Two books, 27 periodicals, 7 pamphlets and 9 catalogues have been added to the Library.

Mr. Archer M. Huntington, one of the Governors, proposed an amendment to the By-laws, adding a new Chapter, permitting the sale or exchange of duplicate coins, medals, etc., at the discretion of the Council, when not specifically restricted by the terms of the gift; such duplicates to be previously exhibited at a regular meeting of the Society.

Mr. Belden proposed to amend the By-law fixing the price of Membership medals, so that the silver medal shall hereafter be sold for eight dollars and the bronze for four dollars.

These changes will come up for action at the March meeting.

The Chairman then announced that the evening would be devoted to an informal discussion and exhibition of the private gold coins of California, Oregon, Utah and Colorado. Mr. Edgar H. Adams, who showed the Five Dollar 1849 gold piece struck by J. S. Ormsby & Co. (the only example known), related some of his experiences in collecting the information in his monograph on private gold, now in course of publication in the *Journal*. Remarks were also made by Mr. S. Hudson Chapman, who exhibited upwards of thirty pieces of various issues and values, including the recently discovered Schaeffer trial-piece¹; Mr. Charles Gregory showed about twenty

¹ Described and illustrated in this number of the *Journal*.

pieces of the different issues; and there were also exhibited a number of California, Mormon and Colorado pieces and patterns from the Society's cabinets.

The meeting then adjourned.

BAUMAN L. BELDEN, *Secretary*.

A regular meeting of The American Numismatic Society was held on Saturday, March 16, 1912, Henry Russell Drowne, one of the Governors, in the chair.

The Council announced the death, on March 3, 1912, of Professor George N. Olcott, Ph. D., of Columbia University, a member since November 18, 1907.

They reported that under the direction of a special Committee, appointed for the purpose, monographs on numismatic subjects will be published from time to time by the Society and delivered gratis to the members; this Committee will have charge of such other publications as the Society may undertake, and at the close of the current year will also assume charge of the publication of the *Journal*. The Committee consists of Mr. William B. Osgood Field, *Chairman*; Messrs. Archer M. Huntington, Henry Russell Drowne, Edward T. Newell, and S. Hudson Chapman.

The office of Librarian has been abolished, and the care of the Library will devolve upon the present staff of the Society, with such assistance as may be required.

The Director reported that the number of visitors in February was 912. Seven books and thirty periodicals, pamphlets and catalogues, including Francesco Gneecchi's important work on Roman Medallions, presented by the author, have been received; the other donors were Messrs. Archer M. Huntington, William B. Osgood Field, and Elias D. Smith.

The accessions to the cabinets include forty-nine coins, six medals and one decoration, presented by Messrs. William B. Osgood Field, J. Sanford Saltus, C. and E. Canesa, Duval et Janvier of Paris, L. P. Smith, Howland Wood, and the Chicago Numismatic Society.

The amendments to the By-laws proposed at the last meeting were adopted.

The Chairman then announced the subject of discussion for the evening as "The Coinage of New England previous to the Establishment of the U. S. Mint." Remarks were made by Messrs. Henry Chapman, S. Hudson Chapman, Henry C. Miller, Hillyer Ryder, Thomas L. Elder, Edgar H. Adams and Herbert Niclewicz. Nearly two hundred and fifty pieces of the period under discussion were exhibited, including upwards of eighty from the Society's cabinets, about seventy-five from Mr. S. Hudson Chapman, one of which was an "Oak-tree Shilling," bent as a witch-piece, and about the same number from Mr. Henry Chapman, among them an unpublished variety of the Connecticut Cent of 1787 and a copper pattern for the Massachusetts Cent of 1776, struck over an Irish Halfpenny of 1747, and the only specimen known. Mr. Ryder showed thirteen pieces, including Vermont, Massachusetts and Connecticut Cents, and a small copper medal with head of George II, and reverse an Indian with bow and arrow shooting at a deer; and Mr. Miller exhibited Oak-tree Shillings, an undated Higley in extremely fine condition, and other Colonials.

The meeting then adjourned.

BAUMAN L. BELDEN, *Secretary*.

CHICAGO NUMISMATIC SOCIETY.

At the January Meeting of the Chicago Numismatic Society the officers for the current year were installed as follows:—*President*, F. Elmo Simpson; *Secretary*, Ben G. Green; *Treasurer*, E. C. Verkler; *Censor*, Harry F. Williams (the retiring President); *Librarian*, Mitchell Baker. Messrs. Williams and Green were appointed members of the Executive Committee. Standing Committees on Membership and Medallion Production were announced, and an Editorial Committee was appointed to issue the Bulletin of the Society monthly, during the present year. The Society has passed a successful year, with interest well maintained.

BRITISH NUMISMATIC SOCIETY.

At the Annual Meeting of the British Numismatic Society, Miss Helen Farquhar, the first Vice-President, was, by ballot of the members, awarded the John Sanford Saltus Medal for her paper entitled "Portraiture of our Stuart Monarchs on their Coins and Medals." In the election of officers for the ensuing year, J. Sanford Saltus was chosen one of the Vice-Presidents, and Carlyon Britton, President.

BOOK NOTICE.

CATALOGUE OF COINS, TOKENS AND MEDALS IN THE NUMISMATIC COLLECTIONS OF THE MINT OF THE UNITED STATES AT PHILADELPHIA, PA. PREPARED UNDER THE DIRECTION OF THE DIRECTOR OF THE MINT. WASHINGTON: GOVERNMENT PRINTING OFFICE, 1912. 8vo, pp. 634; 16 plates.

WHILE this volume does not profess to be a catalogue of the coins, etc., which have been *issued* at the Philadelphia Mint, but only of those in its cabinet, it includes most of the pieces of all classes, with patterns, which have been struck by Government authority. As it is the first attempt that has yet been made to compile a complete catalogue of the collection, it is evident that Dr. Compagnotte, the Curator, who was intrusted with its preparation, had a difficult task before him. To choose the best method of arrangement—whether by dates of issue, by metals and values, by changes in types, or by some other plan—so that the student might readily turn to the particular piece he wished to examine, required careful study, and in the mode adopted the compiler has, we believe, made a wise decision; for he has constantly kept in view the purpose for which the Catalogue was prepared, which was to make the contents of the cabinet easily accessible to all, whether experts or otherwise.

As this publication under Government authority is in several respects a new departure, it seems to demand more than passing notice, and we shall therefore give in detail its general plan of arrangement. It is in two Parts. As an American collection of a national character, the larger portion of the volume, Part I, is very properly devoted to full descriptions of the coins and medals of North and South America, while Part II gives a check-list, much condensed, of those of other countries, ancient and modern, which have been acquired since the cabinet was founded.

The volume opens with an interesting historical *resumé* of the development of our national coinage from the make-shifts of the early settlers, — tobacco, furs, grain, bullets and wampum, — tracing its progress from the first silver coined in Massachusetts regardless of the royal prerogative, Lord Baltimore's money authorized and then suppressed by the home Government, the Rosa Americana copper tokens issued by William Wood, and the various pieces struck by State and national authority prior to the adoption of the Constitution, down to the establishment of the Mint at Philadelphia in April, 1792, and the appearance of its first coins in the following March, the story proceeding as nearly as possible in chronological order; it is supplemented by notes on Pattern pieces and "the minor elements of the coin-types," with brief references to tokens and private issues, — the necessity money of the "Hard Times" of 1837, the gold of the 'Forty-niners, struck for use in California, and the "copper-heads" of the days of the Civil War. This introductory chapter, concise yet complete, will certainly be of special value to the layman, and the professional collector will find it interesting reading.

The Catalogue begins with descriptions of the coinage of the English colonies, — the silver N. E. pieces, Pine-tree Shillings and smaller money struck in Massachusetts, nominally in 1652, heading the roll, followed by the later Colonial issues, silver and copper, and patterns and tokens with a likeness of Washington. Of these various pieces antedating the Mint, there are ninety-one in all. The regular coinage of the United States is next taken up, each metal with its various denominations by itself. First, we have the gold Double-Eagle of 1849, as the largest in value in that metal and the earliest date of that denomination, of which a careful and minute description is given. Those of later dates are then listed in order, the addition of the Mint-letter S in 1855 and 1857, and of the motto "In God we trust" in 1866 being noted, but without further comment until 1877, when the slight changes in obverse and reverse dies are mentioned. The same plan is continued to 1907, when the St. Gaudens designs are fully described, and the difference in subsequent issues noticed.

The Double-Eagles are followed by the Eagles, beginning with the coinage of 1795; then by the Half-Eagles and the other gold coins, closing with the Dollars, each value by itself. The changes in the treatment of types in each group are mentioned as they occurred, — the phrase "Similar to [such a number] except date," sufficiently describing all except when some important modification (as in 1907) took place. The same method obtains with the silver, nickel and copper coins, each series being completed before a different metal of a lower value is taken up. Throughout the Catalogue the compiler has adopted the excellent rule of avoiding mention of the trivial die-differences due to careless workmanship, giving only the variations which originated in an intentional change in type. A list of some two hundred Patterns and of the private gold in the cabinet concludes the Catalogue of the United States coinage.

This mode of arrangement of the money of other American countries and the islands adjacent (whether issued by or for them) — nearly every list being preceded by a brief but instructive and interesting historical sketch — is adhered to through Part I, which is closed by a list of the Medals struck by order of Congress, or for the various Departments of Government, including Presidential, Honorary, War, Historical, Assay, Award, Indian Peace, etc., and many others not the product of the Mint. As we have

said, the plan is somewhat novel, but it is easily understood; and the appearance of new types or varieties can readily be traced without the use of those vexatious cross-references which could not have been avoided if the Catalogue had been made up on strictly chronological lines, combining all values in groups by dates and annual issues. At the same time it shows at a glance the temporary or permanent suspension of a particular coinage.

The plan of Part II has already been indicated; although the descriptions are brief, they are sufficient for identification. The story of the acquisition of some of the rarer pieces, saved from the melting-pot by exchange for bullion of equal intrinsic value, through the recognition of their character or importance by some official in the earlier days, would be interesting reading; the late Mr. William E. Du Bois gave the *Journal* readers some glimpses of his experience in this direction, but this Catalogue had no place for such reminiscences. We have only to say, further, that Dr. Compurette is certainly to be congratulated on the successful completion of his labors. M.

VARIA.

ANOTHER TAFT-DIAZ MEDAL.

IN the last volume of the *Journal* (XLV: 156) a description was given of a medal struck for sale on the occasion of the meeting of President Taft and General Díaz in El Paso, Texas, and Ciudad Juarez, Mexico, October 19, 1909. Mr. C. S. Martindale, of New York, has kindly sent us an engraving of another, alluding to the same event, adopted by the Council of the City of El Paso and the Taft-Díaz Committee of Arrangements as the official Medal of the City. Impressions were struck in silver (999 fine) and copper, size 24, and the dies, which were prepared in English and Spanish, are much superior to those of the piece previously described.

Obverse, Clothed busts of President Taft on the left, and of General Díaz, his breast adorned with Orders, on the right, three-quarters facing each other; LIBERTY at the top divides a wreath of olive, issuing from two right hands joined, beneath the busts. *Reverse*, An inscription in nine lines, the first, second, seventh and last, curving: IN COMMEMORATION | OF THE MEETING | —OF THE— | ★ PRESIDENTS ★ | WM. H. TAFT | —AND— | PORFIRIO DIAZ | OCT. 16, 1909 | AT EL PASO, TEXAS, AND JUAREZ, MEXICO. The obverse of that in Spanish has LIBERTAD, and the reverse the English inscription translated. We have not learned the name of the engraver or where the piece was struck.

HEREAFTER the Swiss Mint is to reserve every year a number of examples of the coins issued during that year, which are intended to supply the cabinets of collectors, the only condition being that not more than two impressions of the same piece shall be delivered to those who may apply for them.

ON the occasion of the thirtieth anniversary of his appointment to be the head of the Department of Oriental antiquities and ancient ceramics, in the Museum of the Louvre, M. Louis Henzey was presented by some of his friends with a commemorative plaque which was the work of the medallist Vernon.

M. VICTOR PETER, of Paris, whose skill in modelling animals has won him distinction, is at work on a series of plaquettes designed to illustrate the Fables of La Fontaine. One of the best of these which have yet appeared is said to be that of the lion and the gnat.



PROCEEDINGS

OF

THE AMERICAN NUMISMATIC SOCIETY

AT THE

FIFTY-FOURTH ANNUAL MEETING

SATURDAY, JANUARY 20, 1912

AND

LIST OF OFFICERS AND MEMBERS

COUNCIL

Term ending January 1917

WILLIAM B. OSGOOD FIELD
FRANK A. VANDERLIP
JOHN I. WATERBURY

Term ending January 1916

CHARLES G. DODD
NEWELL MARTIN
EDWARD T. NEWELL

Term ending January 1915

ARCHER M. HUNTINGTON
DANIEL PARISH, JR.
J. SANFORD SALTUS

Term ending January 1914

EDWARD D. ADAMS
WILLIAM POILLON
EDWARD ROBINSON

Term ending January 1913

BAUMAN LOWE BELDEN
HENRY RUSSELL DROWNE
CHARLES PRYER

OFFICERS

Governors

EDWARD D. ADAMS	HENRY RUSSELL DROWNE
WILLIAM B. OSGOOD FIELD	ARCHER M. HUNTINGTON
DANIEL PARISH, JR.	

Treasurer

CHARLES PRYER

Secretary

BAUMAN LOWE BELDEN

Domestic Corresponding Secretary

HENRY RUSSELL DROWNE

Foreign Corresponding Secretary

EDWARD T. NEWELL

Director

BAUMAN LOWE BELDEN

STANDING COMMITTEES

<i>Ancient Coins</i>	{ EDWARD ROBINSON MISS AGNES BALDWIN EDWARD T. NEWELL
<i>Building and Grounds</i>	{ NEWELL MARTIN CHARLES G. DODD CHARLES P. HUNTINGTON
<i>Decorations, Insignia and War Medals</i>	{ J. SANFORD SALTUS J. COOLIDGE HILLS STEPHEN H. P. PELL
<i>Foreign Coins</i>	{ CHARLES PRYER FRANK C. HIGGINS CHARLES H. IMHOFF
<i>Foreign Medals</i>	{ DANIEL PARISH, JR. VICTOR D. BRENNER HERBERT NIKLEWICZ
<i>Library</i>	{ CHARLES G. DODD MISS AGNES BALDWIN DANIEL PARISH, JR.
<i>Masonic Medals and Tokens</i>	{ WILLIAM POILLON DR. W. T. R. MARVIN BENNO LOEWY
<i>Membership</i>	{ WILLIAM B. OSGOOD FIELD EDWARD D. ADAMS WILLIAM POILLON
<i>Oriental Coins</i>	{ EDWARD T. NEWELL CHARLES GREGORY REV. DR. JAMES B. NIES
<i>Paper Money</i>	{ HENRY RUSSELL DROWNE JOHN M. DODD, JR. HIRAM E. DEATS
<i>Papers and Exhibitions</i>	{ ARCHER M. HUNTINGTON A. PIATT ANDREW WINFRED ROBERT MARTIN
<i>Publication of Journal</i>	{ BAUMAN LOWE BELDEN HOWLAND WOOD T. LOUIS COMPARETTE
<i>Publication of Medals</i>	{ EDWARD D. ADAMS HENRY W. CANNON ARCHER M. HUNTINGTON
<i>United States Coins</i>	{ JOHN I. WATERBURY WILLIAM H. WOODIN HENRY DEFORREST WEEKES
<i>United States Medals</i>	{ FRANK A. VANDERLIP GEORGE F. KUNZ AUGUSTUS G. HEATON

PROCEEDINGS

FIFTY-FOURTH ANNUAL MEETING

THE Fifty-fourth Annual Meeting of The American Numismatic Society was held in the Society's building, Audubon Park, New York City, on Saturday afternoon, January 20, 1912, at four o'clock, Mr. Henry Russell Drowne, one of the Governors, presiding.

The Secretary read the minutes of the regular meeting of December 16, 1911, which were, on motion, approved, after which the Annual Reports of officers and committees were presented.

REPORT OF THE COUNCIL

To the Officers and Members of The American Numismatic Society:—

Your Council would report that the work of the Society has gone on in a satisfactory manner during the past year ; there is a substantial increase in its Permanent Funds, and many donations to its Collections and Library have been received. The details will be given in the reports of the various officers.

Mrs. Edward Groh, who died in 1910, bequeathed to the Society the silver loving cup that was presented to Mr. Groh by members of the Society in 1900, and the sum of Fifteen hundred dollars. This bequest has been received, less the inheritance tax of Seventy-six dollars and twenty-five cents. The money becomes a part of the Permanent Funds of the Society and will be known as the EDWARD GROH MEMORIAL FUND.

Since the last Annual Meeting one Corresponding Member, one Member and seventeen Associate Members have been elected ; of the Associate Members Messrs. George H. Blake and R. Hobart Smith were elected since the December meeting.

The Society has lost by death the following members : —

- December 30, 1910, Thomas Cunningham, *Corresponding Member*, July 7, 1886.
 February 12, 1911, Henri Jean de Dompierre de Chauffepié, *Corresponding Member*,
 March 17, 1902.
 March 23, 1911, Louis Oscar Roty, *Corresponding Member*, December 17, 1910.
 March 28, 1911, Sir C. Purdon Clark, *Honorary Member*, March 16, 1908.
 May 27, 1911, Solomon Woolf, *Life Member*, January 20, 1880.
 June 16, 1911, E. Reuel Smith, *Life Member*, July 7, 1886.
 September 14, 1911, William Gregory, *Life Member*, February 16, 1881.
 September 25, 1911, Joseph C. Mitchelson, *Member*, November 18, 1907.
 October 23, 1911, Richard P. Lounsbury, *Life Member*, December 21, 1880.
 November 27, 1911, Anthyme Saint Paul, *Corresponding Member*, March 15, 1881.
 December 16, 1911, Isaac J. Greenwood, *Patron and Life Member*, January 12, 1859.
 December 19, 1911, John Bigelow, *Honorary Member*, November 15, 1897.
 January 12, 1912, Walter B. Lawrence, *Life Member*, May 17, 1881.

There are now on the rolls twenty-two Honorary Members, fifty-six Corresponding Members, two hundred and twenty-nine Members and ninety-five Associate Members, a total of four hundred and two.

All of which is respectfully submitted.

The Corresponding Secretary presented the following Report :—

REPORT OF THE CORRESPONDING SECRETARY

To the Officers and Members of The American Numismatic Society :—

There have been received and answered the usual number of inquiries about old coppers, and requests for priced catalogues, etc. Some exceedingly unkind individual produced an 1853 Half-dollar without the arrow points and rays, at the recent Chicago Convention of the American Numismatic Association, and various newspapers mentioned the matter and informed the credulous public that this coin was worth from \$25,000 down. The consequence has been that people all over the country have been digging out 1853 Half-dollars *with* the rays and arrow points, and informing us about them, with the expectation of making small fortunes in every case. One party kindly offered us one for \$25,000; the others contented themselves with asking us the price. Some very few letters of inquiry have really been of some interest.

Respectfully submitted,

HENRY RUSSELL DROWNE,

Corresponding Secretary.

REPORT OF THE TREASURER

CURRENT FUNDS

RECEIPTS		DISBURSEMENTS	
Balance, January 21, 1911	\$1,722 32	Salaries and labor	\$723 00
Interest	1,041 17	Supplies	450 82
Annual Dues	1,655 00	Light	377 49
American Journal of Numismatics	2,089 82	Fuel	275 42
Medals	9 00	Freight and cartage	24 98
Sundries	6 25	Postage	93 39
		Stationery	190 03
		Telephone and telegrams	80 28
		Repairs and renewals	44 63
		American Journal of Numismatics	2,104 72
		Publication of Medals	145 00
		Books, Periodicals and Binding	17 30
		Coins and medals	53 50
		Furniture and fixtures	226 01
		Sundries	97 31
		Balance, January 20, 1912	1,619 68
	<hr/>		<hr/>
	\$6,523 56		\$6,523 56

PERMANENT FUNDS

Balance, January 21, 1911	\$1,853 50	Balance, January 20, 1912	\$3,477 25
Life Membership Fees	200 00		
Bequest Mrs. Edward Groh	1,423 75		
	<hr/>		<hr/>
	\$3,477 25		\$3,477 25

LIST OF PERMANENT FUNDS

New York Numismatic Society Donation Fund	\$65 00
Dr. Isaac Wood Memorial Fund	100 00
William Poillon Fund	250 00
P. Hackley Barhydt Memorial Fund	500 00
Jay B. Cornell Bequest	1,000 00
Herbert Valentine Bequest	1,000 00
Joseph N. T. Levick Bequest	50 00
Edward Groh Memorial Fund	1,423 75
Endowment Fund	5,377 98
Life Membership Fund	16,710 52
	<hr/>
	\$26,477 25

INVESTMENTS

Four \$1,000 5% Bonds, Michigan Traction Co.	Par value,	\$4,000 00
Two \$1,000 5% Bonds, N. Y., Susq. & W. R. R.	"	2,000 00
One \$1,000 5% Bond, C. M. & St. P. R. R.	"	1,000 00
One \$1,000 5% Bond, C. & N. W. R. R.	"	1,000 00
Four \$1,000 4% Bonds, Southern Pacific R. R.	"	4,000 00
Three \$1,000 4% Bonds, Western Maryland R. R.	"	3,000 00
Two \$1,000 4% Bonds, Erie R. R., Prior Lien.	"	2,000 00
Two \$1,000 4% Bonds, New Orleans Terminal.	"	2,000 00
Two \$1,000 4% Bonds, St. L. & S. F. R. R.	"	2,000 00
One \$1,000 4% Bond, M. K. & T. R. R.	"	1,000 00
Two \$500 4% Bonds, M. K. & T. R. R.	"	1,000 00
Cash on deposit		3,477 25
		<u>\$26,477 25</u>

CHARLES PRYER, *Treasurer.*

Examined and found correct.

EDWARD T. NEWELL,

HENRY RUSSELL DROWNE,

Auditing Committee.

REPORT OF THE DIRECTOR

To the Officers and Members of The American Numismatic Society:—

Your Director would report that during the past year the Society's building has been open every day, and that the number of visitors shows a most satisfactory increase.

The revised edition of the Catalogue of the Medallion Exhibition of 1910 was published last month. A complimentary copy has been sent to each exhibitor; the remaining copies have been placed on sale at ten dollars each, and a considerable number have already been sold.

The medal commemorating this Exhibition, the work of Godefroid Devreese of Belgium, has also been completed, the dies and one medal have been received and are on exhibition here to-day.

An exhibition of portrait bronzes and other sculpture by Prince Paul Troubetzkoy, was held from February 8th to March 12th, 1911, at which the attendance was twenty-three thousand, six hundred and sixty-five.

In addition to the Society's usual exhibition of selections from its own cabinets, we have had on exhibition for the last two months the Ro collection of Ancient Chinese Money before the round coins were used, consisting of five hundred and eleven specimens, many of which are of great rarity. This collection is loaned by Mr. Ramsden, of Yokohama, and since its receipt Mr. Ramsden has also loaned some most interesting moulds in which the early round coins of China were cast, together with some of the coins before being separated.

Mr. J. Edouard Roiné has placed on exhibition his large plaque entitled *The Aurore of the Twentieth Century*, of which but three or four copies were made. This is probably the most important work of this character that he has made; he produced it in 1900, and it was awarded a gold medal in Paris.

A large number of donations to the Library and cabinets have been received during the year, the most important of which was the Isaac J. Greenwood collection of three thousand, one hundred and thirty-nine coins, tokens and medals, three hundred specimens of paper money, and one hundred and ninety-seven numismatic books and pamphlets; this and other accessions have received special mention in the reports made at the regular meetings.

Since the December meeting the Library has received twenty books and fifty-four periodicals, pamphlets and catalogues, and the total accessions for the year are three hundred and twenty-four books, one hundred and nine pamphlets, ninety-five periodicals, two hundred and fifty catalogues and twenty loose plates.

DONORS TO LIBRARY

H. M. Victor Emanuel III, King of Italy	Library of Congress
Edgar H. Adams	Ohio Archaeological and Historical Society
Edward D. Adams	Dr. W. R. Martin
Joseph Baer & Co.	Dr. W. T. R. Marvin
Miss Agnes Baldwin	Fernand Mazerolle
Bauman L. Belden	Metropolitan Museum of Art
Belgian Numismatic Society	Museum of Fine Arts, Boston
Victor D. Brenner	Newark Museum Association
Bureau of American Ethnology	New York Society Library
Dr. J. G. B. Bulloch	New York State Library
Giovanni Cariati	Martinus Nijhoff
Xavier da Cunha	Daniel Parish, Jr.
Eugène Demole	De Witt Roosa
Henry Russell Drowne	Royal Museum, Berlin
Robert James Eidlitz	J. Sanford Saltus
Thomas L. Elder	L. Bayard Smith
Isaac J. Greenwood	Smithsonian Institute
Charles Gregory	Spink & Son
Mrs. Abram S. Hewitt	Dr. Horatio R. Storer
Karl W. Hiersemann	Swiss Numismatic Society
Hudson-Fulton Celebration Commission	Mme. N. Tacké
Hungarian Numismatic Society	Gen. Gates P. Thruston
Archer M. Huntington	University of Glasgow
Interstate Commerce Commission	Howland Wood
Italian Numismatic Society	Worcester Art Museum
Richard Hoe Lawrence	Yokohama Numismatic Society

The accessions to the cabinets since the December meeting amount to fifteen coins, two tokens, twenty-seven medals and four dies and hubs, including three of the exceedingly scarce medals awarded by the Chamber of Commerce of New York to the defenders of Fort Sumter, in 1861, and a similar set of three awarded to the defenders of Fort

Pickens in the same year, which were presented by Mr. J. Coolidge Hills, six most interesting medallions by Pierre Jean David D'Angers (1788-1856) from Mr. Samuel P. Avery, and a gold and silver proof set of the British coins of 1911, twelve pieces, from Mr. J. Sanford Saltus.

The accessions for the year amount to thirty-two hundred and ninety-two coins, five hundred and ninety-two tokens, three hundred and forty-nine medals, twenty-nine decorations, thirty-three Cufic glass weights,—forty-two hundred and ninety-three pieces in all; also three hundred and one specimens of paper money, four hundred and sixty-five plaster casts of Greek coins, three Japanese sword-guards and six dies and hubs.

DONORS TO CABINETS

Edward D. Adams
 Samuel P. Avery
 Miss Agnes Baldwin
 The Bank of Pittsburgh
 George Beck
 Bauman L. Belden
 Rev. Paul Besson
 Samuel R. Betts
 Edward Bigelow
 George F. Blanchfield
 Victor D. Brenner
 Sir Robert Burdett & Co.
 Charles de Cordova
 Dr. W. A. Cotton
 Godefroid Devreese
 William B. Osgood Field
 John Flanagan
 Richard W. Geldart
 The Governor of Porto Rico
 Hugo O. Greenhood
 Isaac J. Greenwood
 Charles Gregory
 E. Morgan Grinnell
 Frank Guimaraes
 Mrs. Abram S. Hewitt
 O. F. Hibbard
 J. Coolidge Hills
 Hiram Chapter No. 1, Red Bank, N. J.
 Archer M. Huntington
 Michael Jenkins

David H. King
 Lawrence Albert Kohn
 Julius de Lagerberg
 Magnus Emanuel Lagerberg
 Richard Lambert
 Estate of J. N. T. Levick
 Lyman H. Low
 His Excellency, the Duke of Loubat
 Angelo Mariani
 Dr. W. R. Martin
 R. W. McLachlan
 Waldo C. Moore
 Louis Eugène Mouchon
 Edward T. Newell
 Ninth Regiment, N. Y. S. M., N. G. N. Y.
 The Numismatic and Antiquarian Society of
 Philadelphia
 Daniel Parish, Jr.
 Mrs. Stephen H. P. Pell
 Frank Robertson
 J. Sanford Saltus
 The St. Andrew's Society of Philadelphia
 O. Spaniel
 William E. B. Starkweather
 Dr. Horatio R. Storer
 Arthur Train
 Mrs. E. R. Weston
 George B. Wilkinson
 Howland Wood

While a number of these accessions were duplicates of specimens already in the Society's cabinets, and therefore did not really increase the collection, a very large portion were actually needed, and it is most gratifying to note that the collection of American coins has received some important additions.

It would seem to be of particular importance that the Society should possess a complete series of the coins, medals and tokens of our own country that would be un-

surpassed, and while the collection is very strong in some lines, in others it is quite the reverse.

Of the regular Mint series, from 1793 to the present time, the collection is very fine; some of the varieties and dates are missing, and in a number of cases the condition might be improved, but taken as a whole, there are not many better collections. The historical interest which attaches to this series is, however, far exceeded by the Colonial series, comprising coins issued in a number of States at different periods from 1652 to the establishment of the United States Mint, certain pieces of an experimental character, and others made abroad for use in this country.

Of these the Society's collection is not at all large; it is, however, better than it was a year ago, for we have acquired one of the finest Pine Tree Shillings known, and two other examples of this series, a fine New England Shilling, two specimens of the rare Carolina Elephant Token of 1694, a scarce variety of the New Jersey Cent of 1788, and quite a number of other pieces of lesser importance.

The private gold coins struck in Georgia and North Carolina in 1830-1834, by the Mormons in Utah in 1849-50 and 1860, in California from 1849 to 1855, and in Colorado in 1860 and 1861, form one of the most interesting series of American coins, and illustrate the peculiar conditions that existed when they were issued, in a way that nothing else does. They present a money of necessity which, instead of representing a value that it does not possess, is intrinsically so valuable that, though issued in great quantities, the pieces are now scarce because so many have been melted and recoinced, or converted into bullion.

Of the hundred or more known varieties of these pieces the Society's collection contains less than one dozen.

The pattern and experimental coins struck at the United States Mint form another interesting series, of which the Society has very few.

As to the tokens issued by individuals and business houses — some of a political character and others as advertisements — which passed current at periods when there was a scarcity of small change, the Society's collection is one of the best in existence. It is also strong in political and other medals.

To be able to supply the needs of the Society in this line, when the opportunity offers, the Society should have a fund for the purchase of coins. Most generous donations of coins and medals are frequently received, as this report shows; but when a particular piece is needed to fill a gap in a series which we are trying to complete, the chance of obtaining it by donation is remote. Some of the Colonial coins, just mentioned, were obtained by exchange and through the sale of some duplicates, and if the Society had not had the good fortune to have duplicates that it could properly dispose of in this way, it would not have been able to acquire these much needed pieces. Any donations which could be used for this purpose would be very welcome.

All of which is respectfully submitted,

BAUMAN L. BELDEN,

Director.

REPORT OF THE COMMITTEE ON THE PUBLICATION OF THE JOURNAL

To the Officers and Members of The American Numismatic Society: —

Your Committee would report that the four numbers of the *Journal* for 1911 were duly published and distributed. Two important articles have been running through these numbers; one on the Greek coins of Alexander the Great, by Mr. Edward T. Newell, and the other on Private Gold Coins of California, by Mr. Edgar H. Adams. These two articles will continue through several more numbers.

Respectfully submitted,

BAUMAN L. BELDEN,
T. LOUIS COMPARETTE,
HOWLAND WOOD,

Committee.

GOVERNOR'S ANNUAL ADDRESS

BY HENRY RUSSELL DROWNE

Ladies and Gentlemen, and Fellow Members of The American Numismatic Society: —

It is incumbent on one of the Governors of the Society to preside and make a brief address at the Annual Meeting. I regret to state that it seems to have become my turn this time, which is unfortunate, both for the members and myself. It is farthest from my intention to attempt to give you any history of the Society, but I cannot help but think of the old days and the old faces that are no longer with us.

In the year 1882 I became a member, on the introduction of our good friend Mr. Daniel Parish, Jr., and my first visit was to the room we then occupied in the New York University Building fronting on Washington Park. It was long and narrow, with a single window and a big stove. We had the pleasure of the two extremes; when the stove was going it was very hot, but otherwise pretty chilly, except during the summer season.

The first meeting I attended was presided over by Dr. Charles E. Anthon, and I can recall the faces of the genial Secretary, Mr. William Poillon; Curator, Charles Henry Wright, and Librarian, Richard Hoe Lawrence.

Among the enthusiastic members frequently present on these occasions were Messrs. Parish, Dodd, Walter, Doughty, Groh, Betts, Gregory, Oliver, Pryer, Feuardent, Low, de Morgan, Zabriskie, Pehrson, Weeks, Frossard, and several others that I do not now remember.

I recall with pleasure the kindly assistance I received in attributing coins from Messrs. Wright, Doughty and Walter, which did much to encourage my first efforts in this direction and kept me persevering in the right track, — so much so that I have remained faithful up to the present time.

The following anonymous poem on "The Old Coin" may not be inappropriate :—

A massy lump of brass and bronze,
 Moulded by ponderous blow on blow,
 For Nero,—or Vespasian's son,
 In ages dim and long ago.

A cruel mouth, a swinish chin,
 A wolfish eye, almost erased ;
 But half the date, a Victory,
 Two words,—and those almost effaced.

Where is the golden palace now
 That on the Palatine arose ?
 Where are the statue-guarded doors ?
 Where are the temple porticoes ?

For disks of metal shaped like this,
 Swords have been drawn and Lethe crossed ;
 For this, in greedy hope, men's souls
 Have been by passion's tempest tossed.

This is ambition's rich reward ;
 This is a buried Caesar's fame —
 Upon a lump of rusty bronze,
 The two-thirds of a doubtful name.

Many of the old friends have passed beyond the river, and others have fallen in line and taken their places.

We had no paid employees in those early days, and the work was all done by a few active spirits who spared neither time nor pains in their efforts to promote the welfare of the Society.

About this time the scheme was adopted to keep the room open one evening every week and have papers read frequently, which brought the members together, and did much to promote the good work.

When Mr. Henry Booth of Poughkeepsie went abroad and tendered as a loan his collection of ancient Greek coins, we had quite a treat, and one that proved of material advantage. Donations of good material in those days were few and far between, whereas modernly we have been much more fortunate.

During the year 1883 the Society celebrated its Twenty-fifth Anniversary. The meeting was held in a large adjacent room : Hon. Algernon S. Sullivan made an address, and there were quite a number of invited guests present. Altogether it was a very interesting occasion.

I learn that before my advent the Society had met at Mott Memorial Hall on Madison Avenue, then at the College of the City of New York in Twenty-third Street, and later at the exhibition rooms of Gaston L. Feuardent in Lafayette Place. From the New York University Building we at length migrated to Fourth Avenue and Twentieth Street, where we had more space and greater facilities, and from there we moved to a very pleasant room in the Academy of Medicine Building, at Seventeen West Forty-third Street, where we rested for quite a period and grew materially.

Our next step was to the Union Dime Savings Bank Building, at Thirty-second Street and Broadway, where we had three rooms, and from thence — as aptly illustrated in that interesting ancient coin of the Emperor Hadrian which bears the inscription *RESTITUTORI ORBIS TERRARUM* and represents the Emperor as raising a youth, typifying the world, from a kneeling posture to his feet — we, in our turn, were lifted upon our feet by our former President, Mr. Archer M. Huntington, and transported to this delightful situation where you now see us. It is too long a story to tell in detail, but it carries with it many pleasant memories of our old-time members and our hard work and struggles, which have now been crowned with success far beyond our fondest expectations. If laurel wreaths were fashionable and in season, I should be glad to take this opportunity to bestow one on behalf of the Society where it is well merited.

Our Society is the oldest of its kind in America, having been founded in 1858; and though never a large body has made steady progress during all the succeeding years. Its main object has been to promote interest in the science of numismatics, and to assist this by gathering together books relating to the subject, as also in the formation of a collection of coins, medals and decorations.

Patient work and careful attention have rewarded our endeavors, for we have the largest library of numismatic works in this country, and our collection now contains an enormous number of specimens, the fifty thousand mark having been passed years ago.

When you realize that the Society has never had any sum of money to expend in accomplishing these objects and always had to support itself and print its Annual Proceedings from the dues received from members, I feel that we should be proud of our record. Naturally we work in a limited field; numismatists are generally termed cranks, and I am frank to say seem to be few and far between. What we have gathered has been due in the main to the kindly interest and beneficent donations of a few enthusiastic members who have always endeavored to do what they could to promote and further the interest of our Society.

A number of exhibitions have been held in the past, and on various occasions we have caused medals to be struck, of which there now exists a most interesting series, all of which bear either the name or seal of the Society. For this work we have endeavored to select good designers, both at home and abroad, so that aside from the events commemorated, the medals illustrate the contemporary work of some of the best artists obtainable.

Much time is also devoted by the Society to answering inquiries regarding coins and medals which come from all over the United States, and to the dissemination of general information on these subjects. Our main object at the present time is to raise the standard of coin and medal designing and die-cutting in this country. This is a subject that has never received enough careful attention on this side of the water, and until recently the modeling done here has been of rather poor workmanship and shown but little originality of design.

Looking the whole field over, we find but few specimens of higher class than the political or commemorative medals that are peddled in the streets at the time of such celebrations. Then when we turn to the United States Mint, we notice a retrograde

movement from the very beginning, and to-day we have a design on our Half-dollars, Quarters and Dimes, that I am frank to say could be taken for either a male or female head.

Outside of our gold coins only one of our present series really shows merit, and that is our copper Cent, which bears a finely executed portrait of Abraham Lincoln, the work of our fellow member Mr. Victor D. Brenner. The rest of the current issues in silver and nickel only serve to represent the value stamped thereon, and so far as this is concerned answer the purpose. I regret, however, that very little can be said as to their showing any artistic design or work.

The first issues of our coins and medals were in the main of French origin, and either the work of French artists or in part copies of their designs, and with a few rare exceptions the science of die-cutting can hardly be said to have since advanced materially, in this country, until quite recently.

It is to be hoped that the new standard of excellence as set by Messrs. Brenner, St. Gaudens, Weinman, Borglum, Roiné, Flanagan, Pratt, McKenzie and others, may ultimately reach and exert a material effect on the United States Mint, so that we may yet have a series of coins of which we shall be proud, and which will compare favorably with those struck abroad.

As a Society we have been "contributing our mite" to educate the people as to this particular class of art, so that there will be a better understanding of what is requisite to produce effective and artistic work. A number of years ago the Society supported for a time in this city a school for coin and medal designing and die cutting, feeling that by cultivating the root, we might finally raise a tree which would bear fruit. It was a slow process, and owing to lack of interest this school was finally abandoned.

In March, 1910, to further this object, the Society, through the kindly assistance of Mr. Huntington, held "The Representative International Medallion Exhibition" in the adjoining building. This brought together for the first time in this country a most artistic and interesting collection of the best medallion work of the foremost artists in the world. It was certainly a revelation to all who were sufficiently interested to visit it. Few people here had been previously aware of the marked advance which has been made of late years, and which this exhibition so ably demonstrated. This we trust has had, and will have, a lasting effect. A beautiful commemorative medal has since been designed by Godefroid Devreese, the artist to whom was awarded the prize in the competition.

To perpetuate the good work the Society has caused to be issued a magnificent Catalogue of the Exhibition, which has been most carefully compiled and beautifully illustrated, and a copy of which lies before you on the table. I hope that you will look at this book; it certainly needs no recommendation, and the standard of excellence is so high that we may well feel proud of the production.

In conclusion I desire to state that our building here is open on all week days, and also on the first Monday evening of each month, and I hope you will extend a cordial invitation to all who are in the slightest degree interested in coins, medals and decorations, to come and see what we have and what we are doing.

RESOLUTIONS.

The following Resolutions were unanimously adopted : —

Whereas, On December 16th last, Mr. Isaac J. Greenwood, a Life Member and Patron of this Society, passed from mortal consciousness, and

Whereas, Mr. Greenwood became a member of this Society on January 12, 1859, served as Second Vice-President from July 28, 1864, to March 22, 1866, was one of the nine incorporators of the Society, May 16, 1865, and by his recent generous donations of money and the gift of his collection of coins, medals and numismatic books, has shown that his love for the Society and interest in its work outlasted a half century, therefore be it

Resolved, That The American Numismatic Society learns with profound regret of the death of its Member and Patron Mr. Isaac J. Greenwood.

Resolved, That a Memorial Page be set aside in the minutes of the Society, and a copy of these Resolutions be engrossed and sent to the family.

Whereas, This Society has received from the estate of Mrs. Edward Groh a bequest of one thousand four hundred twenty-three dollars and seventy-five cents, and in view of the fact that Mr. Edward Groh at the time of his death in 1905 was the only one of the Founders of this Society who had retained his membership, and was the Curator of this Society, which office he had held during several periods, amounting in all to nearly twenty-eight years, the Council has resolved that this bequest shall be a part of the Society's Permanent Funds and be known as the EDWARD GROH MEMORIAL FUND, and

Whereas, Mr. Groh, during his long connection with the Society, showed a great interest in its collections, as is evidenced not only by the time and gratuitous work that he devoted to them, but also by the gift of his own collection of Civil War Tokens, in 1900, therefore be it

Resolved, That to keep the memory of Edward Groh always green in the department to which he devoted so much time and energy, the income from the Edward Groh Memorial Fund be devoted to the increase of the Society's collections of American coins, tokens and medals, and that donations from the members and friends of the Society, in memory of Mr. Edward Groh, be invited, and any such donations be placed in the Permanent Funds of the Society as additions to the EDWARD GROH MEMORIAL FUND.

The election of three members of the Council, for the term of five years, was next in order, and resulted in the re-election of Messrs. William B. Osgood Field, Frank A. Vanderlip and John I. Waterbury.

The meeting then adjourned.

BAUMAN L. BELDEN,
Secretary.

ROLL OF PATRONS AND MEMBERS

OF

THE AMERICAN NUMISMATIC SOCIETY

JANUARY 20, 1912

ROLL OF PATRONS AND MEMBERS

PATRONS

Adams, Edward D., New York City	1906
Ellsworth, James W., New York City	1907
Gates, Isaac E., New York City	1906
*Greenwood, Isaac J., New York City	1907
Hawley, Edwin, New York City	1906
Huntington, Arabella D. (Mrs. Collis P.), New York City	1906
Huntington, Archer M., New York City	1906
Lawrence, Richard H., New York City	1906
Saltus, J. Sanford, New York City	1906
*Saltus, Medora S. (Mrs. J. Sanford), New York City	1906
Schiff, Mortimer L., New York City	1906
Warburg, Felix M., New York City	1906

* Deceased

HONORARY PRESIDENTS

*Betts, Benjamin, Brooklyn, N. Y.	January 20, 1908
Huntington, Archer M., Baychester, N. Y.	January 17, 1910
Parish, Daniel, Jr., New York City	January 20, 1908
Zabriskie, Andrew C., New York City	January 20, 1908

HONORARY MEMBERS

His Majesty Alphonso XIII, King of Spain	April 18, 1910
His Majesty Manuel II, King of Portugal	April 18, 1910
His Majesty Victor Emmanuel III, King of Italy	January 21, 1901
His Excellency Gen. Porfirio Diaz	March 19, 1906
The Director of the United States Mint, Washington, D. C.	(Ex officio)
The Hispanic Society of America, New York City	May 20, 1907
Babelon, Ernest, Institut de France, Paris, France	November 19, 1910
Bode, Dr. Wilhelm, Berlin, Germany	November 19, 1906
*Bigelow, John, LL.D., Highland Falls, N. Y.	November 15, 1897
Charnay, Désiré, Paris, France	March 20, 1883
*Clarke, Sir Caspar Purdon, London, England	March 16, 1908
Crosby, Sylvester Sage, Cambridge, Mass.	March 21, 1876
da Cunha, Xavier, Director Bibliotheca Nacional de Lisbon	March 21, 1910
Dielman, Frederick, New York City	January 21, 1901
Head, Barclay Vincent, D.C.L., Ph.D., London, England	December 21, 1880
Loubat, His Excellency Joseph Florimond, Duke of, Paris, France	January 7, 1907
Marvin, William Theophilus Rogers, Litt.D., Boston, Mass.	November 19, 1878
Morgan, John Pierpont, New York City	January 21, 1911
Orford, The Right Hon., the Earl of, Norwich, England	November 19, 1906
Prince, L. Bradford, LL.D., Santa Fé, New Mexico	May 20, 1901
Snowdon, Archibald Loudon, Philadelphia, Pa.	March 18, 1879
Storer, Horatio R., M.D., Newport, R. I.	March 20, 1893
Ward, Rev. William Hayes, D.D., LL.D., Newark, N. J.	March 20, 1893
Waterman, Warren Gookin, Nashville, Tenn.	January 7, 1907

* Deceased

CORRESPONDING MEMBERS

(By Amendment to the Constitution, adopted March 18, 1901, residents of the United States are not eligible to election as Corresponding Members. The American Corresponding Members in this roll were elected before the passage of this amendment.)

Andersen, David, Christiana, Norway	May 18, 1893
Andrews, Frank De Wette, Vineland, N. J.	June 12, 1883
Aubert, Rev. A., Quebec, Canada	January 16, 1905
Bahrfeldt, Max Ferdinand, Hildesheim, Germany	May 20, 1884
Baird, Dr. Andrew B., Winnipeg, Manitoba	May 21, 1906
Barron, Edward Jackson, F.S.A., London, England	March 20, 1883
Bates, Thomas Tomlinson, Traverse City, Mich.	June 25, 1868
Bordas, F., Paris, France	November 12, 1910
Bottée, Louis Alexandre, Paris, France	December 17, 1910
Brock, Robert Alonzo, Richmond, Va.	June 13, 1867
Carranza, Carlos, Buenos Ayres, Argentine Republic	November 20, 1883
Cauffman, Emil, Philadelphia, Pa.	February 13, 1868
Cavalli, Gustaf, Sköfde, Sweden	March 20, 1893
Culin, Stewart, Brooklyn, N. Y.	November 15, 1887
*Cunningham, Thomas, Mohawk, N. Y.	July 7, 1886
*de Chauffepié, Henri Jean de Dompierre, President Royal Numismatic Society of the Netherlands, The Hague, Holland	March 17, 1902
Devreese, Godefroid, Brussels, Belgium	December 17, 1910
Doughty, Francis Worcester, Ramapo, N. Y.	May 20, 1895
DuBois, Patterson, Philadelphia, Pa.	November 20, 1883
Ely, Rev. Foster, D.D., Stamford, Conn.	May 20, 1895
Ezekiel, Henry Clay, Cincinnati, Ohio	November 12, 1868
Forrer, Leonard, Bromley, Kent, England	January 15, 1900
Foster, John Watson, LL. D., Washington, D. C.	March 20, 1883
Fuchs, Emil, London, England	November 18, 1907
Gibson, David R., Hamilton, Canada	November 19, 1906
Goddard, William C., Watford, England	March 19, 1894
Gordon, John, Rio de Janeiro, Brazil	May 15, 1883
Gravel, Ludger, Montreal, Canada	November 17, 1909
Greenhood, Hugo Oscar, San Francisco, Cal.	May 17, 1897
Grueber, Herbert A., F.S.A., London, England	January 18, 1881
Hayden, Rev. Horace Edwin, Wilkes-Barre, Pa.	May 16, 1882

Hill, Robert Anderson, Hove, England	March 20, 1883
Howland, Louis Meredith, Paris, France	November 18, 1895
Lagerberg, Magnus Emanuel, Stockholm, Sweden	January 21, 1907
Lilienberg, Major V. E., Stockholm, Sweden	March 16, 1908
Marschall, Rudolf, Vienna, Austria	December 17, 1910
Mazerolle, Fernand, Paris, France	December 17, 1910
McLachlan, Robert Wallace, Montreal, Canada	May 15, 1877
Montelius, Oscar, Stockholm, Sweden	March 16, 1908
Peet, Rev. Stephen D., Salem, Mass.	January 20, 1885
Pennisi di Floristella, Barone, Acireale, Sicily	June 11, 1908
Perini, Cav. Quintilio, Rovereto, Austria	January 21, 1895
Ready, William Talbot, London, England	November 20, 1883
Reid, James, Montreal, Canada	November 17, 1909
Richter, Max Ohnefalsch, Berlin, Germany	March 18, 1884
Rodin, Auguste, Paris, France	December 17, 1910
*Roty, Louis Oscar, Institut de France, Paris, France	December 17, 1910
*Saint Paul, Anthyme, Paris, France	March 15, 1881
Thorndsen, Iv., Konsberg, Norway	November 19, 1906
Thruston, Gen. Gates Phillips, Nashville, Tenn.	May 20, 1879
Thurston, Edgar, Madras, India	May 20, 1907
Tremblay, Peter O., Montreal, Canada	November 17, 1909
University of Glasgow, Glasgow, Scotland	March 18, 1911
Upton, George P., Chicago, Ill.	December 10, 1868
Vernon, Frederic Charles Victor de, Paris, France	December 17, 1910
Vickery, Edgar J., Yarmouth, N. S.	June 11, 1908
Vivanco, Angel, Orizaba, Mexico	May 15, 1883
Vlasto, Michel P., Marseilles, France	May 21, 1900
Williamson, George C., London, England	November 18, 1884
Woodbury, Charles J. H., Boston, Mass.	January 20, 1885

* Deceased

MEMBERS

Acheson, Edward G., Niagara Falls, N. Y.	April 24, 1902
†Ackerman, Ernest R., Plainfield, N. J.	December 21, 1908
†Adams, Edward D., New York City	January 21, 1901
†Agnew, Andrew G., New York City	December 21, 1908
†Allis, Charles, Milwaukee, Wis.	December 21, 1908
Andrew, A. Piatt, Washington, D. C.	January 17, 1910
†Atterbury, John T., New York City	January 20, 1902
†Avery, Samuel P., Hartford, Conn.	November 21, 1892
†Baker, Stephen, New York City	January 16, 1899
Baldwin, Miss Agnes, New York City	June 11, 1908
Baldwin, A. H., London, England	November 16, 1908
†Barrington, Miss Rachel T., Washington, D. C.	January 15, 1884
Beach, Chester, New York City	January 17, 1910
†Beekman, Gerard, New York City	April 17, 1885
†Belden, Bauman Lowe, Elizabeth, N. J.	May 18, 1886
Betts, George W., Englewood, N. J.	November 20, 1905
†Betts, Samuel R., New York City	November 16, 1908
†Bloor, Alfred J., New York City	November 20, 1883
†Booth, Henry, Poughkeepsie, N. Y.	February 28, 1882
Borglum, Gutzon, New York City	June 11, 1908
†Bourn, William B., San Francisco, Cal.	March 30, 1903
†Bowdoin, Temple, New York City	November 16, 1908
†Brackenridge, George W., San Antonio, Texas	May 21, 1900
†Brand, Virgil M., Chicago, Ill.	November 19, 1906
†Brenner, Victor D., New York City	November 19, 1894
†Britton, Charles P., New York City	February 16, 1881
†Browning, J. Hull, Tenaflly, N. J.	March 21, 1898
Buchman, Albert, New York City	January 17, 1898
Buck, John H., New York City	May 20, 1907
Bucknell, Emma W. (Mrs. William), Philadelphia, Pa.	March 18, 1901
†Canfield, Richard A., New York City	March 18, 1901
†Cannon, Henry W., New York City	December 21, 1908
Cary, Isaac H., Brooklyn, N. Y.	March 20, 1905
†Ceballos, Juan M., New York City	March 15, 1881
†Chapman, Henry, Philadelphia, Pa.	November 16, 1908
Chapman, Samuel Hudson, Philadelphia, Pa.	November 19, 1906
†Chisolm, George E., Morristown, N. J.	February 15, 1909
Clapp, John H., Washington, D. C.	May 17, 1909
†Clearwater, Alphonso T., Kingston, N. Y.	March 15, 1909

†Cochran, Alexander Smith, Yonkers, N. Y.	June 11, 1908
†Coley, William B., New York City	January 15, 1906
Conover, Charles H., Chicago, Ill.	April 24, 1905
deKay, Charles, New York City	March 19, 1906
†DeVinne, Theodore B., New York City	January 15, 1906
DeVinne, Theodore L., New York City	April 24, 1902
†Deats, Hiram Edmund, Flemington, N. J.	January 20, 1890
†Deitsch, Edward J., New York City	March 16, 1908
†Dodd, Charles Goodhue, New York City	November 21, 1892
†Dodd, John M., Jr., New York City	January 15, 1878
Dodd, Louis F., New York City	April 24, 1905
Dowling, Robert E., New York City	March 18, 1901
†Drowne, Henry Russell, New York City	March 28, 1882
Drummond, Isaac W., New York City	December 5, 1905
†Durand, John S., New York City	March 18, 1901
Dyer, George R., New York City	November 16, 1908
Elder, Thomas L., New York City	January 18, 1904
†Ellsworth, James W., New York City	May 15, 1893
†Evarts, Allen W., New York City	March 20, 1905
†Ferguson, Rev. Henry, Concord, N. H.	May 15, 1899
†Field, William B. Osgood, New York City	January 17, 1910
Fletcher, Frank Fayette, Minneapolis, Minn.	April 24, 1902
†Frick, Henry C., Pittsburg, Pa.	March 18, 1901
†Frothingham, Charles F., New York City	March 16, 1880
Garrett, Robert, Baltimore, Md.	April 24, 1905
†Gates, Isaac E., New York City	March 19, 1906
†Gates, Rev. Milo H., New York City	January 15, 1906
Gay, Joseph E., New York City	March 18, 1907
†Gibbs, Theodore K., New York City	May 16, 1898
†Gould, George J., Lakewood, N. J.	April 24, 1902
†Granberg, H. O., Oshkosh, Wis.	November 18, 1907
*†Greenwood, Isaac J., New York City	January 12, 1859
†Gregory, Charles, New York City	January 17, 1888
*†Gregory, William, Brooklyn, N. Y.	February 16, 1881
†Grinnell, Elizabeth C. (Mrs. George Bird), New York City	January 15, 1906
†Grinnell, George Bird, New York City	January 15, 1906
†Hartshorn, Stewart, Short Hills, N. J.	July 7, 1886
Hastings, Frank S., New York City	December 21, 1908
†Hatzfeldt, Prince Hermann, Breslau, Germany	March 19, 1906
†Havemeyer, William F., New York City	May 18, 1903
†Hawley, Edwin, New York City	January 15, 1906
†Hearn, George A., New York City	January 16, 1899
Heath, Walter C., Summit, N. J.	November 17, 1909
†Heaton, Augustus G., New York City	March 19, 1900

Henderson, John M., Columbus, Ohio	November 17, 1909
†Hermann, Ferdinand, New York City	January 16, 1893
†Hewitt, Robert, Ardsley-on-Hudson, N. Y.	February 22, 1866
Higgins, Frank C., New York City	March 20, 1905
†Hillhouse, John Ten Broeck, M.D., London, Eng.	May 21, 1906
†Hills, J. Coolidge, Hartford, Conn.	May 17, 1887
Himpler, Francis G., Hoboken, N. J.	May 21, 1894
†Hoffman, Samuel V., Morristown, N. J.	November 16, 1903
Hollingsworth, Zachary T., Boston, Mass.	April 24, 1905
Howes, Benjamin A., New York City	January 20, 1908
†Huntington, Arabella D. (Mrs. Collis P.), New York City	March 19, 1906
†Huntington, Archer M., Baychester, N. Y.	January 16, 1899
†Huntington, Charles P., New York City	January 15, 1906
†Hutchinson, Joseph, San Francisco, Cal.	March 30, 1903
Hyde, E. Francis, New York City	January 16, 1899
†Hyde, Frederick E., M.D., New York City	May 18, 1886
†Hyde, James Hazen, Paris, France	June 3, 1911
Imhoff, Charles H., Hopewell, N. J.	March 15, 1909
†Jackman, Allison W., Poughkeepsie, N. Y.	June 12, 1883
†Jusserand, Jean Jules, Washington, D. C.	November 17, 1909
Kahn, Otto H., New York City	March 20, 1899
Kunz, George Frederick, New York City	January 16, 1893
Laidlaw, James L., New York City	May 20, 1907
†Landon, E. H., New York City	January 15, 1906
†Langdon, Woodbury G., New York City	April 17, 1885
Lawrence, John Burling, New York City	November 16, 1908
†Lawrence, Richard Hoe, New York City	November 16, 1878
*†Lawrence, Walter B., New York City	May 17, 1881
Liveright, Frank I., Newark, N. J.	November 17, 1909
†Loeb, James, New York City	March 20, 1905
†Loeb, Morris, New York City	November 17, 1909
Loewy, Benno, New York City	March 20, 1905
*†Lounsbery, Richard P., New York City	December 21, 1880
†Low, Lyman Haynes, New York City	May 18, 1880
Lydig, Philip M., New York City	April 24, 1905
†McMillin, Emerson, New York City	March 19, 1906
†Manning, Alfred J., New York City	March 17, 1885
†Manning, James H., Albany, N. Y.	November 18, 1907
†Martin, Laura G. (Mrs. Newell), New York City	January 15, 1905
†Martin, Newell, New York City	January 15, 1905
Martin, Winfred Robert, New York City	May 20, 1907
†Mellen, Charles S., New Haven, Conn.	April 24, 1902
†Merryweather, George, Chicago, Ill.	March 16, 1880
†Miller, George N., M.D., New York City	March 19, 1906

†Mills, Abraham G., New York City	March 18, 1901
*Mitchelson, Joseph C., Tariffville, Conn.	November 18, 1907
†Mohr, Louis, Chicago, Ill.	April 24, 1905
Montross, Newman E., New York City	April 25, 1901
†Morgan, J. Pierpont, New York City	April 24, 1902
Morgan, J. Pierpont, Jr., New York City	May 17, 1897
†Morris, Charles, Chicago, Ill.	May 15, 1893
Morris, Nathalie Bailey (Mrs. Lewis Gouverneur), New York City	May 17, 1897
†Nelson, William, Paterson, N. J.	May 18, 1886
†Newell, Adra M. (Mrs. Edward T.), New York City	January 17, 1910
†Newell, Edward T., New York City	January 16, 1905
Newton, James S., Boston, Mass.	May 21, 1900
Niklewicz, Herbert, Brooklyn, N. Y.	November 17, 1909
Noyes, Charles P., St. Paul, Minn.	April 24, 1905
†Ogden, Robert C., New York City	January 15, 1906
†Olcott, Eben E., New York City	March 16, 1903
Olcott, George N., New York City	November 18, 1907
†Orr, Alexander E., Brooklyn, N. Y.	February 16, 1881
†Page, Helen G. (Mrs. William D.), Milford, Conn.	January 15, 1906
†Page, Miss Laura L. G., Milford, Conn.	January 15, 1906
†Paget, Almeric H., London, England	March 20, 1899
†Parent, George W., Montreal, Canada	March 16, 1908
†Parish, Daniel, Jr., New York City	April 13, 1865
†Parish, Henry, New York City	April 22, 1886
Parsons, Arthur Jeffrey, Washington, D. C.	April 24, 1905
Parsons, John E., New York City	April 24, 1905
Peabody, Francis S., Chicago, Ill.	April 24, 1905
†Peabody, George Foster, Brooklyn, N. Y.	April 24, 1905
†Pehrson, Nelson Pehr, New York City	March 20, 1893
Pell, Stephen H. P., New York City	January 20, 1908
†Pereyra, Madame Joaquin de (Jennie C. Grinnell), Bordeaux, France	January 15, 1906
†Perkins, Seymour, New York City	November 16, 1908
†Perkins, William H., New York City	December 21, 1908
†Peters, Samuel T., New York City	April 22, 1886
Peters, William R., New York City	March 18, 1901
Phoenix, Lloyd, New York City	January 16, 1899
Pierce, Henry Clay, New York City	November 16, 1908
†Pierce, Jacob W., Boston, Mass.	January 20, 1908
Platt, Charles H., New York City	November 16, 1908
†Poillon, John Edward, New York City	January 29, 1875
†Poillon, William, New York City	November 11, 1869
†Potts, Jesse W., Albany, N. Y.	November 21, 1898

†Pryer, Charles, New Rochelle, N. Y.	June 4, 1875
Pryer, Harold Chardavoyne, New York City	March 15, 1897
Pryer, Mai E. (Mrs. Charles), New Rochelle, N. Y.	January 17, 1898
†Pyle, James Tolman, New York City	April 24, 1902
†Rea, Thomas B., New York City	April 25, 1901
†Reid, John, New York City	March 21, 1898
†Renwick, Edward Sabine, Milburn, N. J.	February 28, 1882
Rhineland, Philip, New York City	January 16, 1899
Rives, George L., New York City	May 15, 1893
Robinson, Edward, New York City	January 17, 1910
Roiné, J. Edouard, New York City	March 16, 1908
†Saltus, J. Sanford, New York City	November 21, 1892
Santa Eulalia, Count of, Ashbourne, Pa.	May 17, 1909
†Schiff, Jacob H., New York City	January 16, 1899
†Schiff, Mortimer L., New York City	March 30, 1903
Scott, J. Walter, New York City	January 15, 1906
†Seligman, Isaac N., New York City	March 30, 1903
Seligman, Jefferson, New York City	April 24, 1905
†Sherman, William Watts, Newport, R. I.	November 20, 1905
†Sinclair, Henry A., New York City	March 19, 1906
*†Smith, E. Ruel, New York City	July 7, 1886
Smith, Edward R., New York City	November 17, 1909
†Smith, Lewis Bayard, Morristown, N. J.	February 22, 1866
†Speyer, James, New York City	April 24, 1905
Spink, Samuel M., London, England	April 24, 1905
Stewart, William Rhineland, New York City	November 21, 1892
†Sullivan, George H., New York City	November 16, 1908
Tapley, Henry F., Boston, Mass.	May 15, 1905
†Tiffany, Louis C., New York City	May 15, 1893
†Tilney, John S., Orange, N. J.	March 20, 1905
†Todd, Henry Alfred, New York City	March 19, 1906
†Tuck, Edward, Paris, France	November 16, 1908
Tuthill, Luther B., South Creek, N. C.	May 21, 1900
†Tweed, Charles H., New York City	January 15, 1906
†Udall, John Clark, New York City	January 15, 1906
Vanderbilt, Cornelius, New York City	April 24, 1902
†Vanderbilt, William K., New York City	January 16, 1899
Vanderlip, Frank A., New York City	November 17, 1909
†Vanderpoel, Ambrose Ely, Chatham, N. J.	May 16, 1898
†von Post, Herman C., New York City	November 15, 1897
Waitt, Joseph E., Roxbury, Mass.	April 24, 1905
†Walters, Henry, New York City	November 16, 1908
†Warburg, Felix M., New York City	March 20, 1899
†Waterbury, John I., New York City	January 17, 1910

Weatherbee, Edwin H., New York City	March 20, 1899
†Weekes, Henry de Forest, New York City	November 12, 1910
†Weeks, William Raymond, New York City	May 16, 1882
Weil, Henri, New York City	May 17, 1909
Weinman, Adolph Alexander, New York City	January 17, 1910
†Westinghouse, George, Pittsburg, Pa.	April 24, 1902
†Wetmore, William Boerum, Allenhurst, N. J.	May 20, 1879
White, John Jay, Jr., Washington, D. C.	March 19, 1906
†Whittaker, Thomas, New York City	May 17, 1897
†Willets, John T., New York City	May 15, 1883
Wills, Charles T., Greenwich, Conn.	January 16, 1899
†Wilson, W. W. C., Montreal, Canada	June 11, 1908
†Winslow, Edward F., Paris, France	November 18, 1884
Wood, Howland, Brookline, Mass.	November 17, 1909
†Wood, Sarah Bowne (Mrs. Isaac F.), Rahway, N. J.	January 15, 1878
†Wood, Walter, Philadelphia, Pa.	March 20, 1899
Woodbury, John C., Rochester, N. Y.	January 16, 1903
Woodin, William H., New York City	March 19, 1906
†Woodward, J. Otis, New York City	November 18, 1879
*†Woolf, Solomon, New York City	January 20, 1880
†Wyckoff, Edward G., New York City	March 30, 1903
†Wyckoff, Peter Brown, M.D., New York City	March 17, 1885
†Zabriskie, Andrew C., New York City	December 1, 1874

ASSOCIATE MEMBERS

Adams, Edgar H., Brooklyn, N. Y.	November 19, 1906
Bartlett, Bertha K. (Mrs. Franklin), Colorado Springs, Colo.	May 28, 1910
Beck, George, Eldred, N. Y.	May 28, 1910
Benton, A., New York City	November 12, 1910
Blake, George H., Jersey City, N. J.	January 6, 1912
Bothwell, J. W., New York City	May 28, 1910
Brett, George M., New York City	May 28, 1910
Brewster, Nestor H., Newark, N. J.	April 9, 1910
Burke, Rev. Thomas A. Haughton—, New York City	November 13, 1911
Burnham, Roger Noble, Magnolia, Mass.	May 28, 1910
Buzby, Mrs. William J., New York City	December 16, 1911
Cadwalader, John L., New York City	May 28, 1910
Castello, Eugene, Philadelphia, Pa.	November 12, 1910
Chatillon, George E., New York City	November 13, 1911
Chatry, Raymond J., New York City	February 12, 1910

* Deceased

† Life Member

Chew, Beverly, New York City	May 28, 1910
Clark, James A., Middletown, N. Y.	November 17, 1909
Comparette, T. Louis, Ph. D., Philadelphia, Pa.	May 28, 1910
Conkling, Mabel (Mrs. Paul), Boothbay, Me.	May 28, 1910
Corbett, Gail Sherman (Mrs. Harvey Wiley), New York City	May 28, 1910
Cruset, Sebastian, New York City	November 12, 1910
Davison, George A., Philadelphia, Pa.	June 3, 1911
Delano, Jennie W. (Mrs. Warren), New York City	May 28, 1910
Dieges, Charles J., Brooklyn, N. Y.	May 28, 1910
Dietsch, C. Percival, New York City	May 28, 1910
Disbrow, William S., M. D., Newark, N. J.	May 28, 1910
Dodd, Miss Isabel F., Constantinople, Turkey	November 13, 1911
Dows, Rev. Henry A., New York City	March 21, 1910
Eaton, Charles Bean, New York City	May 28, 1910
Egger, Armin L., Vienna, Austria	April 15, 1911
Ehlers, Edward M. L., New York City	May 28, 1910
Eidlitz, Robert James, New York City	December 17, 1910
Eidlitz, Sadie B. (Mrs. Robert James), New York City	April 9, 1910
Elwell, Frank Edwin, Weehawken, N. J.	November 12, 1910
Ewart, Richard H., New York City	May 21, 1906
Faelten, Reinhold, Boston, Mass.	November 13, 1911
Farley, His Eminence John, Cardinal, New York City	May 28, 1910
†Fearing, George R., New York City	June 3, 1911
Flanagan, John, New York City	November 17, 1909
French, Daniel C., New York City	November 12, 1910
†Frey, Albert R., Brooklyn, N. Y.	February 12, 1910
Goldman, Henry, New York City	November 13, 1911
Gould, Edwin, New York City	May 28, 1910
†Greenough, John, New York City	November 12, 1910
Hobart, R. H. Smith-, Hobart, N. Y.	January 6, 1912
Hoblitzelle, Clarence, New York City	November 12, 1910
Jacobs, Alfred B., San Francisco, Cal.	November 12, 1910
Jacobs, Henry Barton, M. D., Baltimore, Md.	March 11, 1911
†Kohler, Rudolph, New York City	November 12, 1910
Kronfeld, Frank, New York City	November 12, 1910
Lagerberg, Julius de, Passaic, N. J.	January 21, 1907
Langton, Berenice Frances (Mrs. Daniel Webster), New York City	May 28, 1910
Leve, A. Atlas, Syracuse, N. Y.	November 13, 1911
Longman, Miss Evelyn Beatrice, New York City	May 28, 1910
McIlvaine, Tompkins, New York City	November 12, 1910
Mansfield, Howard, New York City	November 12, 1910
Marquand, Allan, Princeton, N. J.	May 28, 1910
Mehl, B. Max, Fort Worth, Tex.	April 24, 1905
Michael, Fred, Chicago, Ill.	November 12, 1910

Moritz, Christian G., New York City	May 28, 1910
Morrison, Mrs. John R., Chicago, Ill.	January 21, 1911
Mosenthal, Philip J., New York City	March 19, 1906
Newcomb, Howard R., Detroit, Mich.	November 12, 1910
†Newcomer, Waldo, Baltimore, Md.	November 12, 1910
†Nies, Rev. Dr. James B., Brooklyn, N. Y.	January 20, 1902
Ormond, Miss M. Georgia, Toledo, Ohio	January 28, 1911
†Osborn, William Church, New York City	November 12, 1910
Paddock, Willard D., New York City	November 12, 1910
Pier, Garrett Chatfield, Greenwich, Conn.	November 12, 1910
Poillon, James O., New York City	May 28, 1910
Pope, Mrs. James E., East Orange, N. J.	November 12, 1910
Prichard, A. H. Cooper-, New York City	January 21, 1911
Putnam, Arthur, San Francisco, Cal.	November 12, 1910
Ramsden, Henry A., Yokohama, Japan	November 16, 1908
Raymond, Wayte, South Norwalk, Conn.	May 28, 1910
Reid, Robie Lewis, Vancouver, B. C.	November 13, 1911
Reilly, John, Jr., New York City	May 28, 1910
Rey, Emile, New York City	November 12, 1910
Rimmer, Miss Caroline Hunt, Belmont, Mass.	November 12, 1910
Robbins, Miss Harriet L., New York City	May 28, 1910
Robinson, Edwin P., Newport, R. I.	November 12, 1910
Saunders, Robert, New York City	November 12, 1910
Shear, T. Leslie, New York City	May 28, 1910
Sheehan, Blanche N. (Mrs. William F.), New York City	May 28, 1910
Sheehan, William F., New York City	May 28, 1909
Smith, Elias D., Elizabeth, N. J.	February 15, 1909
Snedden, Eleanor Antoinette (Mrs. Arthur Durant), Avon-by-the Sea, N. J.	November 12, 1910
Stone, Frank F., Los Angeles, Cal.	November 12, 1910
Tuckerman, Alfred, New York City	May 28, 1910
Tuckerman, Paul, New York City	May 28, 1910
Tyrrell, J. B., Toronto, Canada	February 18, 1911
†Vanderbilt, Mrs. William K., New York City	November 12, 1910
Webster, D. Macon, New York City	April 9, 1910
Wendt, Julia Bracken (Mrs. William), Los Angeles, Cal.	November 12, 1910
White, Horace, New York City	March 20, 1899

† Associate Life Member



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CILICIAN DISTRICT.



CILICIAN DISTRICT.



CILICIAN DISTRICT.





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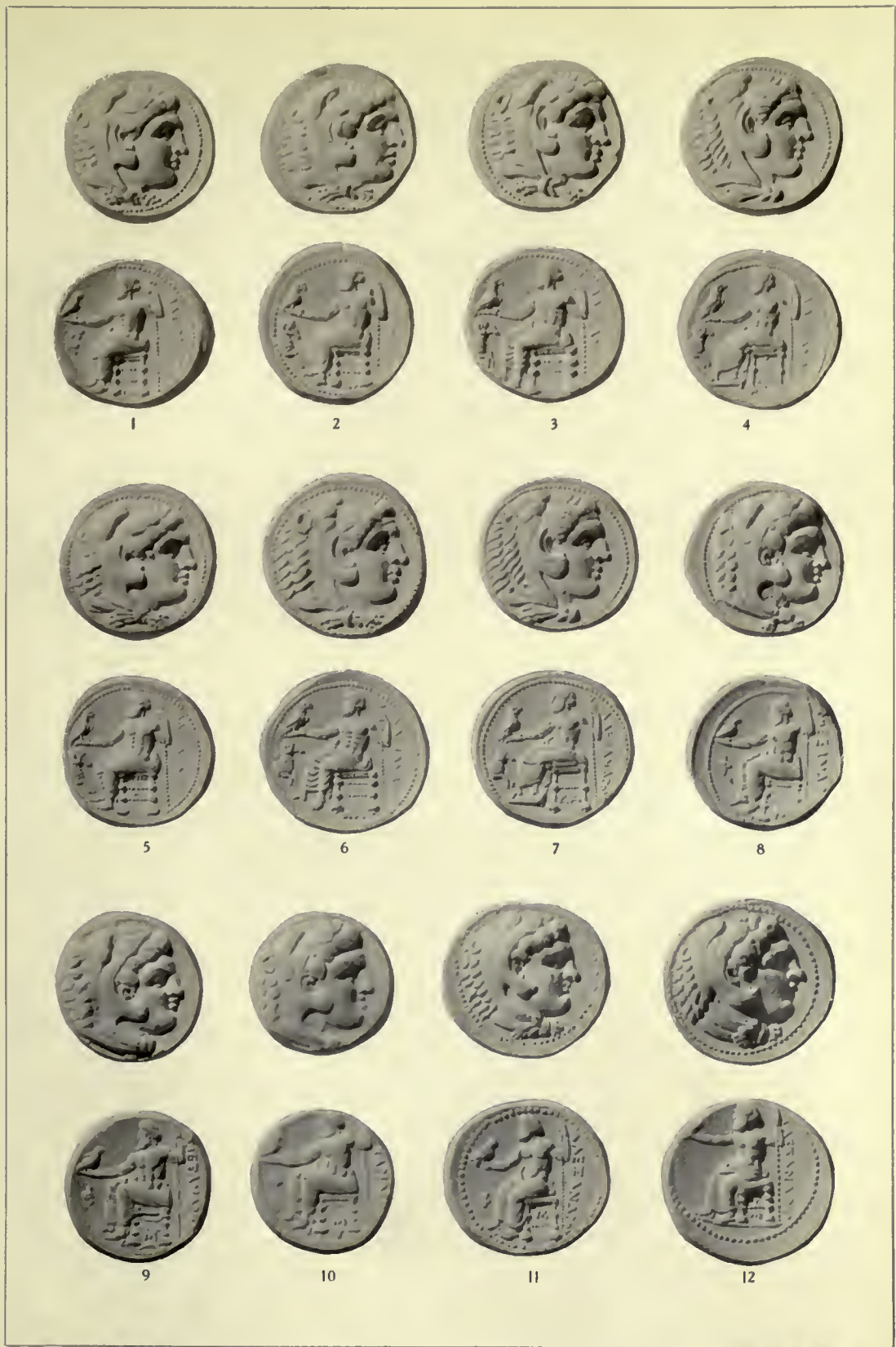
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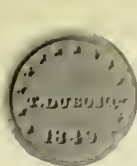
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No. 58.



No. 60.



No. 63.



No. 67.



No. 68.



No. 75. Obv.



No. 73.



No. 75. Rev.



No. 77. Obv.



No. 76.



No. 77. Rev.



No. 78.



No. 83.



No. 79.

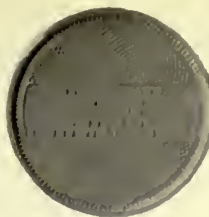




No. 85.



No. 84.



No. 86



No. 87.



No. 88.



No. 89.



No. 90.



No. 92.



No. 95.



No. 96.



No. 99. Obv.



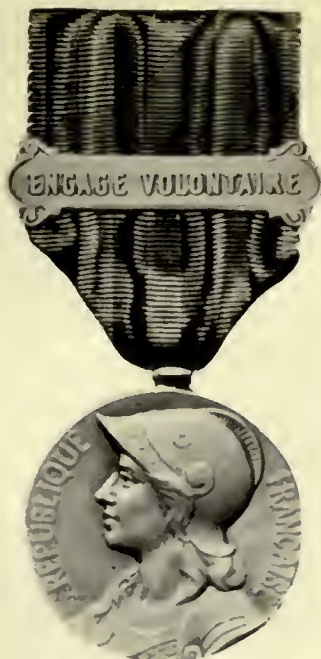
No. 97.



No. 100.



No. 99. Rev.



Obv.



Rev.

RECENT FRENCH MEDAL OF THE WAR OF 1870-71.



Obv.



Rev.

UNIVERSITY OF CALIFORNIA MEDAL.

AMERICAN JOURNAL OF NUMISMATICS.

At mihi plavdo
Ipse domi, simul ac nummos contemplor in arca.
—Horatii, Sat. I, i. 66.

VOL. XLVI: No. 3.

NEW YORK.

JULY, 1912.

REATTRIBUTION OF CERTAIN TETRADRACHMS OF ALEXANDER THE GREAT.

SEVENTH PAPER.

(Concluded from Vol. XLVI, p. 49.)

BABYLON (Circa 330-323 B. C.).

IN assigning this series to Babylon we are but following Imhoof-Blumer, who, in 1896, first proposed this interesting and plausible attribution.⁵³ Sir Henry Howorth in the *Numismatic Chronicle*, Fourth Series, Volume IV, came out very strongly against this attribution, and seemed inclined to revert once more to Müller's rather antiquated work. In a short but very able rejoinder⁵⁴ Imhoof-Blumer disposed of the objections raised and maintained his position. Since then, no one, to my knowledge, has seriously attempted to question his attribution, and I think we are justified in following it here—especially as certain evidences furnished by a study of the Demanhur hoard would seem to be for, rather than against, considering Babylon as one of Alexander's mints. It would be strange indeed if he had not established an important mint in this great Asiatic metropolis, which he intended should henceforth be the capital of his empire.

The dates assigned to this series are determined on the one hand by the fall of Babylon and the capture of the immense treasures of the Persian monarch lying in Susa (from which our coins may very well have been struck), in November of the year 331 B. C., and on the other hand by the changing of the inscription from ΒΑΣΙΛΕΥΣ ΑΛΕΞΑΝΔΡΟΥ to ΒΑΣΙΛΕΥΣ ΦΙΛΙΠΠΟΥ which probably took effect shortly after the accession of the weakling Arrhidaeos (the son of Philip by the dancer Philinna) to the throne in 323 B. C.

⁵³ The late J. P. Six also endorsed this attribution. See *Num. Chron.*, Third Series, Vol. XVIII, 1898.

⁵⁴ *Numismatische Zeitschrift*, Vol. XXIII. *Numismatic Chronicle*, Fourth Series, Vol. VI.

The coinage must have been enormous, an inference drawn not only from the comparative commonness of the coins, but also from the fact that such a large number of magistrates were engaged in its production. As it did not stretch over a long number of years, many magistrates must have been officiating at one and the same time. This fact is furthermore proved by my records, which show several instances where as many as five, six, or even seven distinctive reverse symbols are connected with only one obverse die. As ancient dies were seldom able to last any length of time, this would mean that the magistrates represented by each of these groups were all officiating within the short space of a year at most.

The results obtained from weighing thirty-five uncirculated specimens are as follows: one 17.14; one 17.15; one 17.16; four 17.18; seven 17.19; nine 17.20; five 17.21; one 17.22; three 17.23; one 17.24; one 17.26; one 17.27 grammes. This reveals that at the Babylonian mint there was considerable fluctuation in the weights, but within certain well defined limits.

BABYLON (323-317 B. C., and later).

Of this group types 243 and 244 only were included by Imhoof-Blumer among the issues he attributed to Babylon. The same style, fabric, and workmanship however, is also found on coins of types 241 and 242. This points with no uncertain finger to a common mint; furthermore this mint was undoubtedly that of types 191-240,—in other words, Babylon. On close inspection we shall find that all the reverses of types 191 to 240 show a Zeus-figure with legs parallel, and feet resting on a footstool, and also that an exergual line never appears except spasmodically on a few reverses of types 191-218 as the result of the work of a single die-cutter who chanced to favor this device. With type 219 the exergual line is definitely abandoned until a later period. In my possession there is a tetradrachm inscribed $\text{BA}\xi\text{I}\Lambda\text{E}\Omega\xi\text{ }\Phi\text{I}\Lambda\text{I}\text{TT}\text{Π}\text{OY}$ (var. M. 85) which, besides identical style, shows the same peculiarities.⁵⁵ This coin forms the transition to types 241-244. Coins of type 241 still lack an exergual line, but the right leg of Zeus is drawn back behind the left.

Types 242 and 243 follow with the same peculiarities. With type 244 $\text{BA}\xi\text{I}\Lambda\text{E}\Omega\xi\text{ }\Phi\text{I}\Lambda\text{I}\text{TT}\text{Π}\text{OY}$ is changed again to $\text{BA}\xi\text{I}\Lambda\text{E}\Omega\xi\text{ }\text{A}\Lambda\text{E}\Xi\text{A}\text{N}\Delta\text{POY}$, probably on receipt of the news of the death of Philip Arrhidaeos and the consequent accession of Alexander IV to the sole power. With this type we also see the disappearance of the footstool and the addition of an exergual line. Thus my reasons for separating types 235-240 from type 244, though their

⁵⁵ Inasmuch as the specimen in question did not come from the Demanhur deposit, it is not shown in the plate.

inscriptions are identical [BAΞΙΑΕΩΞ ΑΛΕΞΑΝΔΡΟΥ], and interpolating the BAΞΙΑΕΩΞ ΦΙΛΙΠΠΟΥ coins, are based solely on certain peculiarities of style. This arrangement alone will satisfactorily display the commencement, progress and development of certain individualities of style and type which are peculiar to our series up to their culmination (so far as we are at present concerned) in type 244.

The weights vary between 17.15 and 17.21 grammes for coins of types 241 to 244.

ALEXANDRIA (EGYPT).

Svoronos' attribution of these particular Alexanders to Egypt⁵⁶ is probably correct—at least no contrary evidence can be deduced from a study of the Demanhur find. Of type 247, Sig. Dattari writes me, the hoard contained over a hundred specimens, mostly in the finest condition. This fact speaks well for an Egyptian origin. Svoronos, in the work cited, thinks type 248 was struck *circa* 309–308 B. C., by Ptolemy I, for the use of his garrison in Corinth. If this is accepted, we shall have to bring types 246 and 247 down to a later date than that at which he has put them,⁵⁷ for the styles of the three pieces are contemporaneous. It must be noted that practically all the coins of these three types from the find were in uncirculated condition, the remainder showing but very slight wear, which all goes to show that they were struck but a short time before the hoard's deposit.

Uncirculated specimens of these four types weighed: Type 245, one 17.24; type 246, one 17.25; two 17.24; type 247, one 17.25; type 248, one 17.20 grammes.

UNCERTAIN MINTS.

The close resemblance of types 249 and 250 to the varieties we have given to Egypt seems to indicate the same mint. Certainly Müller's assignment to Traelium in Macedonia may be rejected. All the Demanhur specimens of these types were in mint state. Weights: 17.20, 17.22, 17.23, 17.24, 17.25, 17.26 (two coins).

Types 251 and 252 are from a common mint, as some of their obverse dies are identical. Weights: 17.18, 17.23, 17.26, 17.28 (two coins), 17.30 grammes.

Types 253, 254, and 255 are also from one mint. So far, I have found only a single obverse die used with the three reverse varieties. Weights: 17.23 for two coins of type 253; 17.20 for a coin of type 254; and 17.16 and 17.21 for two coins of type 255. A specimen of type 256 weighs 17.25 grammes; another, of type 257, weighs 17.24 grammes.

⁵⁶ Svoronos: *Τὰ Νομίσματα τοῦ Κράτους τῶν Πτολεμαίων*. Athens, 1904.

⁵⁷ *Circa* 330–323 B. C., for type 247; 323–317 for type 246.

Type 258 is certainly of Eastern origin. The earliest ones are of fine style (Plate XXX: 11), and they weigh between 17.22 and 17.26 grammes per coin. There seems to have been a later issue, of very poor style (Plate XXX: 12). The weights of these latter pieces fall to 17.09 and 17.13 grammes per coin.

RESTRIKES, COUNTERMARKS, AND "GRAFFITI."

RESTRIKES. — While a great many of the Demanhur Alexanders show unmistakable signs of having been struck over old flans, in only two cases is it possible to distinguish enough of the original coin to place it in the group to which it once belonged. In one case we have type 89 (attributed to Cilicia) struck over a coin from the Pella mint (one of types 28-33); in the other we have type 244 (attributed to Babylon) struck over a coin of type 125 of uncertain mintage. This habit of restriking seems to have been fairly common in the Eastern mints, judging from the many examples found which show evident signs of such a practice.

COUNTERMARKS. — Countermarks appeared only three times on the coins of Demanhur origin which I have been able to inspect. One countermark consists of a pellet in the centre of a sunken circle, with six rays running out from the pellet to the circle's edge—the whole resembling a wheel. This occurred once on a coin of type 1. The second countermark in general appearance is not unlike certain ones often found on Fourth century coins of Crete. It seems to consist of a raised, oblong object, surrounded by pellets. This particular countermark occurred once on a coin of type 28 (Pella), and once on a coin of type 129 (Arados).

"GRAFFITI."—"Graffiti," or letters scratched on the surface of the coin, are very common on the Demanhur specimens. Particularly often are they found on the issues which have been attributed to Pella. Such letters are: A, Δ, ΔA, Λ, ΛA, M, N, ΠA, Σ, X, XI, IK, and others now indecipherable. Many of these occur also on coins of Cilician fabric, or Babylonian, Phoenician, and other Eastern mintages. On these, too, we often find Phoenician letters: א, ב, ג. In a few cases we have symbols like the "pentalpha" (☆), arrow-points, etc., but these are rare. None of the "chopmarks" so often seen on Athenian and Ptolemaic tetradrachms from Egyptian finds have occurred on the Alexanders known to have come from Demanhur.

BURIAL OF THE HOARD.

The obvious and most definite aid in determining the approximate date at which the great hoard of Demanhur was buried is found in the dated series of the Ake mint. Of this series the only dates represented by coins in the

find are 20, 21, 22, 23, 24, and 25. Unfortunately there chance to be two eras to which these may refer; namely, the regular era of Alexander the Great, beginning with the year 336 B. C., and the era of Alexander in Phoenicia, commencing with the year 333 B. C., in which he overthrew the Persian power at the battle of Issos, and liberated the Phoenician cities from the Persian yoke. If we take the last year (25) known to have been present in the find as a criterion on which to base calculations for the earliest possible date at which the hoard could have been buried, we arrive, according to the first era, at 311 B. C., or according to the second, at 308 B. C. Rouvier's arguments⁵⁸ for the second (333 B. C.) as that used throughout the Phoenician cities are most convincing, and to my mind should be accepted here. It certainly was the era used at Sidon, and evidences of the latest issues of Ake point to the same conclusion for this city. On the other hand the hoard itself, though in a purely negative way, seems to favor 311-310 B. C., as the date of deposit, for we notice that Ptolemy's first issue (attributed by Svoronos to 316-311 B. C.) of types other than Alexander's, was present,⁵⁹ but none of his later issues (after 311 B. C.); the Pella issues of the hoard, as we have seen, fit very nicely into the period 336-311, but not later; the year-numbers of the Ake coins *may* refer to the era 336 B. C.; the Babylonian series seems to stop with the issue of the years 316 to *circa* 315 B. C., etc. A conservative numismatist may therefore prefer to place the date of burial at about 311-310 B. C. Certainly, however, the hoard was not buried *before* 311 or much after 307 B. C.

RÉSUMÉ.

The great value which the Demanhur hoard holds for science lies in the fact that it furnishes us with some concrete evidence as to the comparative importance of the various mints during the period 336 to 310 B. C., and the relative magnitude of their several coinages. Thus we learn that the most important of the many mints in operation throughout Alexander's empire was undoubtedly Pella, and this not only during his life-time, but also during that of his two successors, Philip Arrhidaeos, and Alexander, son of Roxana:—for over one-third of the coins which have been brought to my notice from the Demanhur hoard belong to the Pella series. This alone shows what an important *rôle* this mint once played in the economy of the empire, for it must be remembered that our hoard was probably formed and was certainly *buried*

⁵⁸ *Revue Numis.*: 1909, pp. 321 *et seq.*

⁵⁹ Sig. Dattari, in a letter to me, confirms the presence in the hoard of ten specimens bearing the types: *Νομισματα τοῦ Κράτους τῶν Πτολεμαίων*, Plate I: Nos. 12 to 18.

elephant head-dress. *Rev.* Seated Zeus, as on the regular Alexander tetradrachms. See Svoronos: *Τὰ Νομισματα τοῦ Κράτους τῶν Πτολεμαίων*, Plate I: Nos. 12 to 18.

in Egypt. Egypt had always been and undoubtedly continued to remain, at least during Alexander's reign, in much closer commercial relations with the great cities of the Phoenician coast and inland as far as Babylon, than with Macedonia and the north. The preponderance of Pella coins is therefore significant, — doubly so when we notice that other northern mints are but scantily represented in the find.⁶⁰

Moreover, the Pella issues seem to have followed each other in rapid and continuous succession throughout the period covered by the hoard,⁶¹ whereas the other contemporary Alexander mints, with the possible exception of Babylon, show a much more irregular and spasmodic activity in their coinage. Aside from the fact that the actual coins of the Pella mint outnumber those of any other source in the Demanhur find (which of itself might be due to pure chance), we fortunately have an incontrovertible piece of evidence showing the preëminence of Pella, — namely, the total number of obverse and reverse dies made and used there many times outnumber those employed at any other one mint during the same period. We therefore conclude that even though the mints of the great commercial cities of the East, such as Arados, Sidon, and Babylon and others, played an important part in the administration of Alexander's empire, it was none the less a secondary one, and that the first place was undoubtedly occupied by Pella. This city then, as the capital of Macedonia, as the administrative centre of Alexander's dominions in the West, as his base of supplies, and as the recruiting grounds for the most powerful and reliable portion of his army — the Macedonian — issued the bulk of his coinage, and continued to do so for some time after his death.

It is interesting to note in this connection what time has preserved for us in the pages of Arrian and Diodorus Siculus. Arrian, XVI, says: "He [Alexander] also sent Menes down to the sea, as governor of Syria, Phoenicia, and Cilicia, giving him 3,000 talents of *silver* [note this, especially] to convey to the sea, with orders to dispatch as many of them to Antipater as he might need, to carry on the war against the Lacedaemonians."⁶² Diodorus (Book XVII) says that Menes used 1,000 talents; hence Antipater received 2,000 talents, or roughly speaking about \$2,500,000 in silver to coin. Now we know that Pella was his administrative residence, and that there he recruited his army. Hence there can be no doubt that it was the Pella mint which turned this immense amount of bullion into coin of the realm to pay the soldiery. In this little passage therefore we have a neat explanation why

⁶⁰ By less than one hundred specimens.

⁶¹ Our previous study of the actual coins shows that all the various magistratal issues of Pella are linked together in an almost unbroken chain, from first to last, by a series of identical obverse dies; thus prov-

ing that there was no cessation of coining during this period, and that each series followed closely on the heels of its predecessor.

⁶² Translation of E. J. Chinnock, M. A.: London, 1893.

so much silver was coined there. We are sure that more treasure-fleets reached Macedon from Alexander, as hoard after hoard of Persian wealth fell into his hands in his triumphal progress eastward. In Diodorus, Book XVIII, 12, we read: "He [Antipater] left Macedonia . . . with all the fleet, composed of one hundred and ten triremes, which Alexander had used to transport to Macedonia the royal treasures of the Persians." This is in connection with Antipater's preparations for the Lamian war and his advance into Thessaly. One hundred and ten triremes could transport a great deal of bullion, and a considerable part of this was no doubt intended for Antipater to use in defraying the expenses of the war. That he turned this into coin, and at Pella, is a reasonable deduction.

It is also rather interesting to note that numerically, both in actual coins and in obverse and reverse dies, the largest of the Pella issues are types 28-33. The sequence of the Pella types as given, is proved to be approximately correct by the sequence of identical obverse dies. If my attribution of types 36-39 to the year 318 or thereabouts is correct, it follows that types 28-35 cover the years between Alexander's death and 319 B. C.,—in other words the exact period when Antipater was undergoing extraordinary expenses for the Lamian war, to meet which in his capacity of regent he must have coined great quantities of money at his capital, Pella.

The Demanhur hoard makes it clear that the provinces under the direct jurisdiction of the royal house of Macedon were well supplied with regal coinage, struck within their boundaries, during the reigns of Alexander and his successors. Thus we have a large and busy mint at Pella, supplemented by certain subsidiary mints in Macedon and Thrace, supplying the necessary coinage for the European provinces. Hellas and the coast of Asia Minor were provided for by the autonomous issues of their principal cities; after the death of Alexander many of these cities lost their autonomy, and their coins were probably supplanted by more or less spasmodic issues of Alexander coins. Cilicia seems to have been administered by royal appointees. We are certain that all true autonomous coinage ceased with Alexander's conquest, and a coinage of regal character succeeded. This is represented by types 86 to 127. For Syria and Phoenicia the mints of Arados, Sidon, Ake, and Damascus issued coins of Alexander's types in huge quantities. These issues may be civic rather than regal, as in all cases the cities' names appear on the coins (in abbreviated form), and we know that Alexander allowed these cities a quasi-autonomous form of government. A few coins have been attributed to Egypt, and some collected under "Uncertain Mints" seem to have been struck there as well.

We now have the large and evidently very important coinage bearing the monogram ΑΒ (types 191-240) still to be accounted for; and at the same time the province of Babylonia, the ancient centre of Asiatic culture and power, the seat of Alexander's new capital, is left entirely without a coinage. Can this be merely a coincidence? It does not seem possible. The evidences that can be adduced to support this are: First, — All of the principal cities and districts outside of Babylon and the valleys of the Tigris and Euphrates rivers seem so well supplied with Alexandrian coinages, that it is difficult, if not impossible, to find a gap which will contain such a large series. Second, — The style of these coins is highly individualized, and, taken as a series, entirely unlike any of the others which make up the Demanhur hoard. Third, — The mint where the series was struck lay to the east of the Mediterranean, because (a): Not only is the style unlike anything in Greece or Asia Minor, but is identical with certain thick coins, *Obv.* Seated Baal (or Zeus); *Rev.* Lion prowling to left, — which are certainly Eastern, and furthermore, as a rule, are found to the east of Syria.⁶³ (b): The style is continued on certain coins of Seleucus I, of Alexander types but inscribed ΒΑΣΙΛΕΥΣ ΣΕΛΕΥΚΟΥ , which can not well be attributed west of Syria. (c): Dr. Head in his *Historia Numorum*, p. 198, says: "Decadrachms also exist, but are of great rarity; didrachms, triobols, and obols occur somewhat more frequently. All coins of these unusual denominations appear to be of Syrian origin." In fact, some of the very few known specimens of the decadrachm⁶⁴ were found at Nippur, a site in the district of Babylonia. The Babylonian origin of the series seems to be fairly well attested, and so completes the chain of provinces belonging to Alexander's empire, where it is most probable that a coinage bearing his particular types was struck.

As it has been my intention that this monograph should deal solely with the issues of the Pella mint from 336 B. C., to *circa* 307 B. C., and with the Demanhur hoard which illustrates it, I have in no place drawn attention to such gold or subsidiary silver and bronze coins⁶⁵ as were struck in conjunction with the silver tetradrachms of Alexander. The latter alone went to form the hoard, and so have alone been discussed here.

In closing I would like to express the hope that collectors and museums possessing important specimens known to have come from this great Egyptian find will not fail to publish them, in order that the sum total of such information which can be drawn from a study of the hoard may be further increased or definitely confirmed.

EDWARD T. NEWELL.

⁶³ Imhoof-Blumer in *Numismatische Zeitschrift*, Vol. XXIII; *Numismatic Chronicle*, Fourth Series, Vol. VI.

⁶⁴ All of Alexander's decadrachms are of *one* style;

this style is identical with that of the series' under discussion.

⁶⁵ Except in the case of Pella.

THE PHIPPS-ALBEMARLE MEDALS.

THERE is a small but interesting group of Medals, closely related to each other, and bearing on the exploits of a noted character in early New England history—a Governor of the Province of Massachusetts Bay in one of its most troublous periods. Of these one at least is extremely rare, and original issues of the other two may perhaps be justly regarded as equally so, as will be seen below. None of them are of frequent appearance in our coin sales. Two of them—the San Domingo Treasure medal of Sir William Phipps, and the Jamaica medal of the Duke of Albemarle, alluding to the same incident,—were struck in 1687; the third, of which there are several varieties, most of them probably restrikes of comparatively recent date, commemorates the failure of the expedition under Phipps to capture Quebec; it is known as the *KEBECA LIBERATA* medal, and bears the date of 1689. The first two were struck in England and the third in the Mint in Paris.

The story of the recovery of an immense treasure from the sunken wreck of a Spanish galleon, lost upon a reef near Hispaniola more than half a century before the search, to which the first two allude, reads more like a romance than sober history, and shows how often what seems a mere accident proves to be the turning-point between success and failure, and Hawthorne relates it in his "Grandfather's Chair." The description of the Phipps Treasure medal is as follows:—

Obverse, Accolated busts of James II and his Queen, Mary of Modena, in profile to right. The King is represented as laureated, wearing a periwig of long, flowing hair; his neck is bare, but he has a breast-plate of scale armor, partly concealed by drapery; the Queen's bust is also draped. Under the truncation in small letters, G. B. (the initials of George Bower, who was one of the engravers in the Royal Mint, 1664–90.) Legend, IACOBVS · II · ET · MARIA · D · G · MAG · BRI · FRAN · ET · HIB · REX · ET · REGINA . (James II and Mary, by the grace of God King and Queen of Great Britain, France and Ireland.)

Reverse, The open sea with a ship to left anchored in the distance; her sails are furled and a large ensign with a cross is floating at her stern; a small boat with two sailors near her side, and a larger one with men working over a wreck in the foreground. Legend, above, · SEMPER TIBI PENDEAT HAMUS · The motto, which is from Ovid's *Ars Amoris* (III: 425), advises Perseverance, or literally, "Always keep your hook hanging." Very possibly it has some reference to the hooks and drags which Phipps is said to have constructed after plans of his own, to find the lost galleon, and it certainly describes a marked trait in his character. In exergue, in two lines, NAVFRAGA REPERTA | 1687 (The wreck found.) Gold and silver. Size 33 A. S., 55 mm.

We believe that it is not generally known to collectors that two varieties of this medal exist, struck from different dies, the variations however being very slight. One

is three *mm.* smaller than that described above, and on its obverse the King's breast-plate is not of scale armor; on the reverse the small boat near the ship is lacking and the wreck in the foreground is somewhat larger than on the other. The rim has a ring for suspension. Both varieties appeared in Hamburger's Sale of November 21, 1910 (Nos. 952 and 953). Betts does not mention the smaller piece. From the description given it seems not improbable that the second may have been the original, and that the dies were subsequently altered; the writer has not had an opportunity to compare the two. Impressions were presented to the officers and men engaged in the expedition and to the promoters.

William Phipps, the fortunate finder of the sunken wreck of a Spanish treasure-ship, was born at Pemaquid, Maine, February 2, 1651. His father, a gun-smith from Bristol, England, had crossed the ocean in the early days of the Colony and settled on the very verge of the Eastern wilderness, where his family — himself and wife with their twenty-six children, all by one mother and only five of whom were daughters' — lived the simple life of a pioneer, sometimes struggling, with only his boys to aid him, to win a scanty harvest from a not over-fertile soil, facing the storms of northern winters and the dangers from savage foes. He died while William, who was one of his younger sons, was still a child, and the boy, unable even to read, was left to the care of his mother; he found employment until he was eighteen in tending sheep, but that monotonous life was repugnant to a youth who had been trained amid such surroundings. His inclination led him to follow the sea, but as no opportunity presented itself, he entered into an apprenticeship with a ship-carpenter, employing his leisure hours in learning to read and write; and at the close of four years' service he settled in Boston. If we may believe the quaint narrative of Cotton Mather, whose judgment was, we can hardly doubt, largely influenced by the friendship between his father, Increase Mather, and Phipps, the latter while still a young man had visions of future wealth and prominence.

After completing his apprenticeship he engaged in business as a ship-builder, and in occasional trading voyages, but without marked success. In 1675 he married a widow, one Mrs. Hull, the daughter of Capt. Roger Spencer, somewhat older than himself, and possessing a small property, which enabled him to extend his business; but of the next ten years of his life we have only fragmentary accounts. It is evident however that he became a master mariner, and when fortune seemed to shun him, he consoled his wife with assurances that he should yet obtain the command of a King's ship, and "become the owner of a fair brick house in the *Green Lane* of North Boston." These sanguine hopes were realized in time, for in 1685 he was

1 Mather's *Magnalia*, II: 38, who gives a sketch of his life.

given the command of an English Man-of-war, and a few years later he built the promised house on the corner of Salem Street and Green Lane — afterwards called Charter Street, in recognition of his services in the period following the Andros troubles ; but whether the prophecy was really a youthful dream of Phipps, or was written by his famous biographer after its fulfillment, has been questioned.

On one of his voyages he chanced to hear of a Spanish treasure-ship which had been lost somewhere near the Bahamas, and seeking the wreck in a small vessel which he owned and commanded, he was successful in recovering a portion of her rich cargo. It was not enough to defray his outlay, but was sufficient to convince him that satisfactory results might be expected from similar searches for Spanish gold, if the expedition were properly equipped ; his hopes were stimulated by a story of the wreck of a far more richly laden galleon, of which he learned while homeward bound. Immediately after his return to Boston he sailed for London, where, as subsequent developments prove, he must have had powerful friends, and though New-Englanders were no favorites at the court of King James, that monarch, who was fond of naval enterprise, is said to have been pleased with the blunt and gallant sailor, and aided him in his application to the Admiralty with his personal influence. Before the year closed Phipps was appointed to command the "Rose-Algier," one of the King's ships, carrying eighteen guns, with a crew of ninety-five, and sailed on his quest. For months but little was heard from the expedition, and in June of 1685 a secret communication was sent from London to Stoughton and Dudley at Boston, requesting them to look after the King's interest against "Captain William Phipps, who departed hence in January, and hath been some months upon the wreck."

His men proved mutinous, but Phipps defeated their designs, and sailed for Jamaica, where he discharged most of the crew and shipped what few seamen he found in the port, to fill their places. To obtain further information he next proceeded to Hispaniola, where he luckily met an old Spaniard who directed him to the precise reef where the galleon sunk ; Phipps was obliged however, by the condition of his vessel, to return to England, without attempting to locate the wreck. The naval authorities received him coldly, and declined further aid, but he was not discouraged by their refusal, and soon succeeded in interesting private individuals in his schemes. How it was that he was able to do this has always been a mystery, but he won the help of the Duke of Albemarle and a few other gentlemen, and the King gave them an exclusive patent for some years to come, though whence he derived the powers he granted does not appear.

Equipped with a good ship and a large tender, he sailed for Port de la Plata. There he secured some Indian divers, and built a stout boat, capable of carrying a dozen or more; his experience as a ship-wright proved of value, as he worked with his men. The party then proceeded to examine the rocks where the galleon was lost. The sea was calm, and they rowed around the reef several times; as its sides rose nearly to the surface, and then sank away precipitously, the treasure-seekers hoped to find the sinking wreck had lodged on some projecting rock, but the divers came back disappointed. The sailors strained their eyes in vain gazing into the clear water, but just as they were about to row away, one of them, says an old biographer, "perceiving a curious sea-plant growing in a crevice of the rocks, sent down one of the Indians to obtain it. When he returned he told them that he had discovered a number of ship's guns lying in the same spot. Other divers were immediately sent down, and one soon brought up a large ingot of silver, worth from two to three hundred pounds sterling." Marking the spot they returned to port, but Phipps could not believe their story until he saw the ingot, when he exclaimed "Thanks be to God, we are all made."

All hands went vigorously to work; that part of the hold where the bullion was stored was first entered, and, soon after, the coin, packed in bags and placed with the ballast, was found. A calcareous deposit covered them, which required to be broken up with sledges, but the pieces-of-eight and precious stones they contained had suffered no detriment by their half century of submersion. In a few days three hundred thousand pounds were brought to the surface. Before their work was completed, a small vessel arrived from Providence, commanded by Captain Adderley, with whom Phipps had thoughtlessly made an appointment; he too obtained several thousand pounds' value of silver, but the poor man was unable to bear his good fortune; he became insane and died a year or two later.

A lack of provisions obliged Phipps to leave the reef before he had finished his examination. An oath of secrecy was taken by all parties, twenty more heavy ingots were raised as the last day's work, and then Phipps sailed for England. Somehow the oath did not prove binding, and when Phipps returned a year or two later, he found his secret was known to the Bermudans, and the wreck had been stripped of all its contents. He arrived safely at London some time in 1687, and the treasure was divided. The King was entitled to a tenth under the patent, and was urged to seize the whole, his advisers claiming that the grant had been made under imperfect information; but he refused and promised future honors to the gallant sailor. Phipps received as his share sixteen thousand pounds and was knighted. The Duke of Albemarle added a gold cup, valued at one thousand pounds, for Lady

Phipps, and his share was ninety thousand pounds. The remainder, after paying the expenses of the expedition, was divided between its promoters, the officers and men.

The second Medal of the group under notice relates to the same event as the preceding, as the reverse legend shows, and was struck in honor of Christopher, Duke of Albemarle, one of the principal supporters of Phipps in his search. We give the description before commenting further on the later life of Sir William, the events which led to the unsuccessful attempt to capture Quebec, and which evoked the "Kebeca Liberata."

Obverse, Bust of the Duke to right; he is in armor elaborately decorated and draped with a rich costume. On the truncation are the letters G. B. F. (George Bower fecit.) Legend, CHRISTOPHORVS . ALBEMARLIÆ . DVX . IAMAICÆ . LOC . TEN . GEN . GVB . GEN . (Christopher, Duke of Albemarle, Lieut. General and Governor General of Jamaica.)

Reverse, Neptune, reclining to the left on the shore of the ocean, rests his arm upon an urn and holds his trident. In the distance are two vessels. Legend, EX . AQUA . OMNIA (All things from water. A clever application of the maxim of the ancient philosophers that all created things originally came from water, though the direct reference is of course to the recovery of the wrecked treasure.) Silver. Size 29 A. S., 48 mm. Very rare.

Christopher, the second Duke of Albemarle after the revival of the title by Charles II, was as we have said, the chief promoter of Sir William's expedition. He was the son of George Monk, a soldier of fortune, whose services in the decisive battle of Dunbar had commended him to Cromwell; in 1654 the Protector made him Governor of Scotland, but on New Year's Day, 1660, he crossed the border, and a few weeks later entered London. In May of that year he welcomed Charles II at Dover, and the Restoration of the Stuarts was largely due to his support, which the King rewarded with a dukedom. He died January 4, 1670, and his son Christopher succeeded to the title, which however reverted to the crown on his death in 1688. William III, eight years after his accession, created Admiral von Keppel, one of his devoted followers, Earl of Albemarle, and his descendants have been prominent in later English history. The first Duke was the Norman Odo, brother-in-law of the Conqueror, but that line became extinct during the reign of Henry III, though the title was subsequently revived at least four times for different persons, of whom Gen. Monk was the last.

In the troubles which preceded the overthrow of Andros, Phipps was in England, where he enjoyed the personal favor of James and was able to be of

service to Increase Mather, then President of Harvard, who had crossed the ocean to plead for the restoration of their ancient privileges to the Colonies, or at least for the restriction of the power of their arbitrary Governor. Sir William returned to New England with the appointment of High Sheriff, but his efforts to aid his fellow-citizens in defending their titles were constantly thwarted by the artifices of Andros and his Council. Once more he went to London, where he found William and Mary on the throne and James an exile. The banished Monarch offered him the Governorship of New England, which he wisely refused, and with Mather was able to prevent the continuance of Andros in power by William. He then returned to Boston, arriving May 29, 1689.

The following spring an Indian war was raging on the frontier, and Phipps, though having no experience in military matters, offered his services to Gov. Bradstreet. He was given the chief command of an expedition against Nova Scotia and L'Acadie, and in May surprised and captured Port Royal. An invoice of the spoil which he brought back, preserved in the archives of Massachusetts, is a curious document, showing a remarkable conglomeration. There were seven hundred and forty pounds of gold and silver, fifty casks of brandy, and twenty-one pieces of artillery; while packed indiscriminately in hogsheads were vestments of the Roman priesthood — perhaps their first appearance in the staid Protestant town — a red waistcoat and two pairs of shoes, with fourteen old kettles, pots and stewpans, a white coat, two caps and a hood. The authority from whom I take this partial list remarks: "The doughty band seem to have plundered even the kitchens." Reaching Boston May 30, he found he had been elected to a seat at the Board of Assistants two days before, and at once assumed the office.

The success of the expedition against Port Royal led the Province to plan an attack on Quebec, then defended by the aged but still vigorous Count Frontenac. The garrison was known to be small, and the authorities seem to have thought that as Acadia had been acquired with little or no expense, the same happy result might be expected at Quebec, even without the aid of the mother country. The promise of "half the plunder taken from the enemy" to the officers, soldiers and sailors who volunteered, served as "an inexhaustible bank," and a fleet of thirty-two vessels, carrying twenty-two hundred men, was speedily assembled. Sir William was again made commander-in-chief, with Major John Walley, who proved to be inefficient, if not a coward, as his second. The expedition sailed from Nantasket Roads August 9, and on September 27 was within seventy-five miles of its destination. Ridiculous delays for occasional landings to set up the British flag on unoccupied and barren coasts, for which Walley seems to have been chiefly

responsible, had given the French time to strengthen their defences; and when Phipps arrived before the city on October 5, the garrison was more than equal to the invading force.

The small-pox was prevalent in Boston when the expedition left, and had soon manifested its presence among the soldiers; confined to their vessels, they could not escape exposure, and so greatly reduced was their strength, that only about thirteen hundred effective troops could be landed. Several attacks were made however, and the accounts given by the French show that the Provincials fought well, but Walley's own story proves his incompetence and cowardice. A violent storm added to their troubles, and as another assault in the weakened condition of the invading forces was evidently hopeless, they were obliged to withdraw. In a little more than a week from the first demand for the surrender of Quebec, they began their homeward voyage, which proved to be most disastrous. A tempest scattered the ships; one was never heard of again, another was burnt at sea, and a third was wrecked, though the crew were saved. Four were blown so far from the coast that it was weeks after Sir William returned that they finally made the harbor. The French King, rejoicing in the successful repulse of his enemies, ordered a medal commemorating his victory to be struck, which completes the group relating to Sir William Phipps. The description follows:—

Obverse, Bust of Louis XIV in profile to the right; he wears the familiar periwig with curled and flowing hair, and there is no drapery; under the truncation at the left, I. MAVGER. F. Legend, LUDOVICUS MAGNUS REX CHRISTIANISSIMUS (Louis the Great, Most Christian King).

Reverse, On the left of the field Quebec personified, murally crowned, is seated on a rock; her left arm rests on a shield blazoned with the lilies of France; on either side behind are banners (one of England) and a shield lies at her feet; in the background are pine trees. At the foot of the rock, on the right, is a river-god (the St. Lawrence) and a beaver crawls down the rock from right to left. Legend, FRANCIA IN NOVO ORBE VICTRIX (France victorious in the New World.) In exergue, in two lines, KEBECA LIBERATA | M.DC.XC. (Quebec delivered, 1690.) Silver and copper. Size 26, A. S., 43 mm.

This medal has been repeatedly restruck, especially in copper, the reverse combined with several different dies. Betts mentions seven (Nos. 68-74), two with Mauver's head of the King, another by "R." (Roettier or Roussel), one by Dollin, another with a slight variation in the legend, apparently by the same artist, still another with the mint-mark of Lille, and finally one described in *Medailles de Louis le Grand*, Ed. of 1723: 234, which does not name the engraver, but notes that the bust is "in a depressed circle," and the planchet is larger than the other.

The existence of the latter reverse (Betts 74) has been questioned, because of the difference in size (32, not 26 A. S.), and because the beaver is described as crawling *up* the rock at the *left*, which agrees with the engraving in the *Journal* (IX: facing p. 1), following that in Shea's Charlevoix, and Sandham, p. 51; McLachlan, referring to this engraving in the *Journal* (XIV: 44) says, under his No. XVI, "the artist's name is not given under the bust" (which may be readily explained by the various obverses used in restriking), and "the beaver is on the *right*, crawling *down*," as on Betts 68. If the authorities cited by Betts under his 74 can be relied on, it would seem that there are two varieties of the reverse, differing in size and in details as noted, but we have been unable to learn of any example of 74 now extant. The obverse described by McLachlan (XVI) is that of Betts 72, and he mentions two others, one by Mauger (XVII) and one by "R" (XVIII, Betts 70); the latter he thinks is the original combination.¹ We note, in conclusion, that *Medailles de Louis le Grand*, Ed. of 1723, mentions several medals of that monarch, of which no impressions are now known, and the dies of which "do not now exist in the French Mint."

The repulse of the Quebec expedition seriously embarrassed the Colonial government, for the "plunder" failed to materialize, the treasury was empty, and the troops clamorous for their pay. Bills of credit of various denominations from two shillings to ten pounds sterling—then a novel expedient—were issued, and Phipps, recognizing the fact that the condition of affairs was largely attributable to his lack of success, accepted a considerable amount at par, when holders could obtain "no more than fourteen shillings to the pound," and paid for them in specie. But the Province was still without a Charter and its credit was low, so that much time elapsed before the notes were finally redeemed, closing the episode.

In 1691 he again went to London, where he aided Mather in securing the new Charter, and the King appointed him Captain-General and Governor-in-chief of the Province. He arrived at Boston in the frigate *Nonsuch* in May, 1692, and received a cordial welcome. Of his administration, during which the Witchcraft delusion arose, his closing act,—a general pardon to all those who had been accused or convicted of intercourse with evil spirits,—was perhaps the most to his credit. But his later life and military services, his gradual loss of popularity, due to a hasty and irascible temper, and his recall to England, have no bearing on the series of medals we have been considering, and need no mention here. It is however interesting to find that just before his death he was seeking to revive the Albemarle Patent, and once

¹ The carelessness which allowed officials of the French Mint, some twenty-five years ago or more, to use any head of Louis XIV they chanced to select for striking obverses of this medal and the Carthagina pieces of 1697, or of Louis XV for those of the Franco-American jetons of 1751-58, was long ago checked, but it probably explains the varieties mentioned by Betts.

It seems impossible at present to identify the original with certainty; but we may hope that the reproduction of rare early French medals, especially those of a historical character, now engaging the attention of the authorities of that Mint, and often requiring careful research in the archives, may in due time settle these doubtful points.

more tempt fortune in a search for another Spanish galleon laden with treasure, cast away somewhere in the West Indies, of which he had learned ; but after a very brief illness he died February 18, 1695, at the early age of 45 ; and thus closed a career in which, Gov. Hutchinson says, " by a series of fortunate incidents rather than by any uncommon talents, he rose from the lowest conditions in life to be the first man in his country." This judgment may well be thought too severe. He earned Fortune's favors by ceaseless industry and indomitable perseverance ; he must have possessed more than ordinary ability and tact, to win not only the support of his powerful associates, but the steadfast friendship of King James ; his private character was irreproachable, and his most bitter opponents never denied his integrity or the sincerity of his patriotism.

M.

INACCURATE TABLES OF ROMAN COINS IN AMERICAN LATIN GRAMMARS.

IN the most of the Latin grammars published in this country, some of which are in common use in the High Schools and Colleges, the statements regarding Roman money and the tables of Roman coins are so inaccurate as to be often misleading, and generally are of very little value to the student ; in fact they are of so little worth that the compilers of these grammars would have done well to follow the example of Prof. Bennet and omit such tables altogether.

Drawing, perhaps, from a common source, common to all of them is the chief offence of giving tables of the coins that are partly correct for an early period of Roman history, but which do not hold good for the period to which the literature that the pupil will read belongs. And, still worse, the tables, as they stand in the grammars, do not as a whole fit any particular period. For example, the tables quoted below from three of the grammars are correct as concerns the copper and silver coins for the period from B. C. 268 to B. C. 217, but do not correctly give the monetary system in use after B. C. 217 ; but the statement in the Gildersleeve-Lodge and the Hale-Buck grammars, that " 25 denarii = 1 Aureus " is not true of the period prior to B. C. 217, because no gold was then coined by the Romans : for their earliest gold coinage was in B. C. 217, according to some authorities, but may have been as early as B. C. 241, according to others. But even if we accept the earlier date for the first coinage of gold by the Romans, nothing is gained for the accuracy of the grammars ; for that gold coinage was isolated, limited, put forth to meet a pressing necessity, and perhaps by private enterprise ; and, besides, that

early gold coinage had no *Aureus* of the value of 25 *denarii*, but only the three denominations of 20, 40, and 60 *sesterces*.

In the monetary system in use prior to the crisis of the Second Punic War, two and one-half *asses* did equal a *Sestertius*, and four *sestertii* or ten *asses* were equal to a *Denarius*, but the catastrophe at Trasimene endangered the credit of the State and compelled financial measures to assist the treasury. The chief measure is stated by one or two later writers, and the accuracy of their source of information is attested by the coins themselves. Thus Verrius Flaccus (Festus, p. 347) says: "By the *Lex Flaminia* the number of *asses* to the *Denarius* was increased to sixteen, when the Roman people were hard pressed by the Hannibalian war." And Pliny (N. H. 33, 45): "When, in the dictatorship of Q. Fabius Maximus the Romans were hard pressed by Hannibal, the *As* was made uncial, and it was decreed that the *Denarius* should be valued at sixteen *asses*, the *Quinarius* at eight, and the *Sestertius* at four." And from that time on, not two and one-half *asses* equalled a *Sestertius*, and ten a *Denarius*, as stated in the grammars, but four and sixteen *asses* respectively. The indication of the value, XVI (*asses*), actually occurs on some issues.

On the other hand, the mark, X, so often found on the *Denarii*, while originally indicating the value of the *Denarius* as equal to 10 *asses*, when found on later issues can only signify the denomination of the piece and not its value. In the case of the *Quinarius*, the half of the *Denarius*, the mark of value, V (*asses*), was supplanted by the initial letter, Q, of the denominational term. And the common use of *denarius aureus* to designate the gold coin when, later, gold was introduced into the coinage, shows that the term *denarius*, when applied to a coin, had lost its original sense of "the sum of ten," and had come to mean simply the denomination of the coin. The transfer of a silver denomination to a gold coin, with a qualifying word, is common in the history of coinages.

Furthermore the grammars only mention the silver *Sestertius*, and take no account of the *Sestertius* struck in brass (*orichalcum*), the only metal in which that denomination was issued after the coinage reform of Augustus in B. C. 15. In fact after B. C. 217 the silver *Sestertius* was chiefly a money of account, and was actually coined in very limited amounts only in B. C. 89 and a few years following, and again from B. C. 49 to 43; whereas the brass *Sestertius* (the barbarously miscalled *First Brass*) was one of the most important coins of the late Republic and especially of the imperial period.

Again, it is not only inaccurate to mention the *Aureus* in a table of Roman coins which is applicable only to the period before B. C. 217, when gold was not coined, but it is probably wrong to employ the form, "*25 denarii = 1 Aureus*." For while the statement of value is correct, yet it is likely that a Roman business man habitually stated the value of a gold piece in *sestertii* and not in *denarii*. The *sestertius* was the customary unit of reckoning, as is shown throughout the literature; and where the *denarius* is employed as apparently a unit of account, it generally has a specific meaning, as in the *Monumentum Ancyranum*, where the *denarius* plainly represents the price of a *modius* of wheat — Augustus made his *congiarium* to the people in a cash equivalent of the usual distribution of grain. Besides, as above alluded to, the gold coins struck in B. C. 217, bear indications of value in *sestertii*. For these reasons it seems probable that the tables would be more in accordance with Roman practice if they read: 100 *sestertii* = 1 *Aureus*.

It is perhaps worth while to quote the tables as they are set down in the various grammars, and also to give the accompanying statements regarding coins and values.

ALLEN & GREENOUGH.

§ 633. "The Sestertius was probably introduced at a time when the *As* had been so far reduced that the value of the new coin ($2\frac{1}{2}$ asses) was equivalent to the original value of the *As*. Hence, the Sestertius (usually abbreviated to IIS or HS) came to be used as the unit of value, and *nummus*, *coin*, often means simply Sestertius. As the reductions of the standard went on, the Sestertius became equivalent to 4 asses. Gold was introduced later, the *aureus* being equal to 100 sesterces. The approximate value of these coins is seen in the following table: —

" $2\frac{1}{2}$ asses = 1 sestertius (HS)	value nearly 5 cents.
10 asses or four sestertii = 1 denarius	" " 20 cents.
1000 sestertii = 1 Sestertium	" " \$50.00."

The carefully prepared paragraph in their New Latin Grammar does much to correct the wrong impressions which the student would get from the table.

HARKNESS: COMPLETE LATIN GRAMMAR.

§ 646. "The principal Roman coins were the *as*, of copper; the *sestertius*, *quinarius*, *denarius*, of silver; and the *aureus*, of gold. Their value in the classical period may be approximately given as follows: "

Here follow statements of the values in modern money of the various Roman coins and money of account.

"1. The *as*, the unit of the Roman currency, contained originally a pound of copper, but it was diminished from time to time till at last it contained only $\frac{1}{24}$ of a pound.

"2. The *sestertius* contained originally $2\frac{1}{2}$ *asses*, the *quinarius* 5, and the *denarius* 10: but as the *as* depreciated in value, the number of *asses* in these coins was increased."

GILDERSLEEVE—LODGE.

"The unit was originally the *as* (which was about a pound of copper) with its fractional divisions. This gradually depreciated, until, after the Second Punic War, the unit had become a *sestertius*, which was nominally $2\frac{1}{2}$ *asses*."

The table is as follows:—

$2\frac{1}{2}$ <i>asses</i>	= 1 <i>sestertius</i> (about 4 cents).
2 <i>sestertii</i>	= 1 <i>quinarius</i> .
2 <i>quinarii</i>	= 1 <i>denarius</i> .
25 <i>denarii</i>	= 1 <i>aureus</i> .
1000 <i>sestertii</i>	= 1 <i>sestertium</i> ."

HALE—BUCK.

"674. The *as* was reduced till, at the close of the Second Punic War, it weighed but one ounce. Its value was then a little less than two cents (or about 1*d.* English).

"675. Other coins were the *sestertius*, a small silver coin, the *denarius*, a larger silver coin, and the *aureus* or gold piece. The sum of a thousand sesterces was called a *sestertium* (originally a Genitive Plural, 'of sesterces'). The word *nummus* ('coin') is often attached to *sestertius* or *aureus*. When used alone *nummus* stands for *sestertius*." The table is as follows:¹

$2\frac{1}{2}$ <i>asses</i>	= 1 <i>sestertius</i> ² (a little more than 4 cents, or 2 <i>d.</i> English money).
4 <i>sestertii</i>	= 1 <i>denarius</i> ³ (a little more than 16 cents, or 4 <i>d.</i> English money).
25 <i>denarii</i>	= 1 <i>aureus</i> (about \$4, or 17 <i>s.</i> English money).
1000 <i>sestertii</i>	= 1 <i>sestertium</i> (about \$42.50, or £8: 10 <i>s.</i>)."

¹ "Since values frequently changed, a table can be only approximate."

² *Semis tertius*, the third part a half, i. e. two whole numbers + $\frac{1}{2}$.

³ *Denarius*, a piece of money containing ten *asses* (*deni*); cf. "tenpence."

Least accurate of all, but most assuring, is Professor Hale's presentation of the subject, as will readily appear. His note on the word *sestertius* enjoys the distinction of being far more obscure than the thing explained.

Some of the earlier Latin grammars presented a completeness of treatment throughout which to-day seems to be regarded as a sin; and in that respect *Andrews and Stoddard* sinned conspicuously in treating the Roman coins and coinage system! In a few brief paragraphs under Section 327 all the important, and the most of the unimportant, facts about Roman coins are stated, and stated correctly in so far as the facts were then known. Later investigations have resolved many difficulties and clarified the whole subject.

Perhaps I may venture to give tables of Roman coins that will illustrate the changes in the system after the introduction of a silver coinage in B. C. 268. This is the period to which the grammars confine themselves, properly enough perhaps; yet it would certainly be of real assistance to some who might go to a Latin grammar for information on the money and system of coinage of Rome, if it were pointed out clearly that the earlier copper coinage was based on a *duodecimal system*, with a unit (the *As*) divided into its one-twelfth or *uncia*, its one-sixth or *sextans*, and its *quadrans*, *triens*, *semis*, etc.; and that with the introduction of a silver coinage a *decimal system* was also introduced.

FROM B. C. 268 TO B. C. 217.

$2\frac{1}{2}$ asses = 1 Sestertius.

4 sestertii = 1 Denarius.

As noted above, no gold was coined in this period, unless the 20, 40, and 60 *sestertii* pieces, the first gold coined by Romans, belong to the latter part of it.

FROM B. C. 217 TO B. C. 15.

4 asses, bronze = 1 Sestertius, silver.

2 sestertii = 1 Quinarius "

2 quinarii = 1 Denarius "

100 sestertii = 1 Aureus.

Gold was coined in considerable quantities only toward the end of the period, in Caesar's time.

FROM B. C. 15 TO A. D. circa, 215.

While it may seem superfluous to begin with the Quadrans and introduce into a table the divisions of the *As*, yet by so doing there is brought before the pupil the entire series of coins actually issued and in use; besides it is the usual practice in tables of modern coins.

COINS.

2 quadrantes, bronze	= 1 Semis, bronze.
2 semisses	= 1 As, "
2 asses	= 1 Dupondius, brass.
2 dupondii	= 1 Sestertius "
2 sestertii	= 1 Quinarius, silver.
2 quinarii	= 1 Denarius "
50 sestertii	= 1 Quinarius (aureus).
2 quinarii, or 100 sestertii	= 1 (Denarius) Aureus.

MONEY OF ACCOUNT.

1000 sestertii = 1 sestertium.

T. L. COMPARETTE.

THE COINAGE OF MUSCAT AND OMAN.

MUSCAT, situated on the easternmost tip of Arabia, in the province of Oman, is probably about the hottest place in the world. A Persian poet once wrote in reference to the city, "To the panting sinner it gives a lively anticipation of his future destiny." Out of the beaten paths of to-day's commercial trade-routes, we hear and know little of its modern life, and are reminded of the place only by some occasional incident such as the President's giving a roll-top desk to the reigning Sultan. Of the ancient history of Oman we know next to nothing; the Himyarites probably did not extend their conquests so far to the east, as none of their remains have been discovered in Oman, though traces of their sway are found in the Yemen and the Hadhramaut.

We get our first reliable information of the place from the early Arabian geographers, and we know that in the ninth century ships from Sherif to China stopped at Muscat. Sometime earlier than this, Arabs from the Yemen probably had a colony there, because from about that period a long line of Imams ruled over the province, with capitals at Nazweh or Rostak. The title of Imam signifies a sort of priest-king, like Melchizedek. The Omani do not recognize the two Imams that immediately succeeded Mohammed, and they are in consequence considered as outsiders by the other Moslems; for Islam, be it known, has as many jarring sects as have other religions.

Marco Polo, in his wanderings to unknown lands, stopped at some port in Oman, but we can hardly say that this region came in contact with Europeans until 1506, when Albuquerque landed there on his way to India. He however left enough of a garrison behind him to occupy the place, and they and their successors held Oman in the name of the King of Portugal for one hundred and forty years, despite a constant warfare all this while with Omani, Bedawin and Turks.

The present dynasty was founded by Ahmed bin Sayid or Sooud, in 1741. His grandson dropped the use of Imam, contenting himself with the simple title of Sultan, and consequently the Imamate of Oman has, with one exception, been held in abeyance. The country reached the height of its prosperity under Sultan Sayid bin Sayid, 1804-56. During this period the Omani occupied by conquest a large part of the Arabian littoral, with portions along both sides of the Persian Gulf and of Beluchistan, and finally, in 1856, Mombasa and Zanzibar were added. On Sayid's death two claimants for the throne arose; England, however, promptly stepped in and gave a part to each, — Zanzibar to Burghash, and Oman to Sultan Tourki. During the last half century the power of Oman has steadily dwindled; its decay is largely

due to the advent of steam-navigation, which has left out the city in its reckoning as a port of call; but the suppression of piracy (which, if the truth were known, furnished Oman in by-gone days with the largest excuse for its existence), together with internal jealousies and civil wars, have put the final touches to its downward career.

The present Sultan, Fessul, has but little authority outside of the walls of Muscat; nevertheless we owe to this ruler numismatic thanks, for so far as known, Fessul is the only Omani Sultan who has issued coins. What was used in Oman in other ages is not clear. In recent years rupees and the Maria Theresa dollars have served as the common medium of exchange. The issues of Fessul have been copper pieces of one-twelfth and one-quarter Annas, which began in 1893. The principal varieties are as follows:—

1. ONE-TWELFTH ANNA, 1311. *Obverse*, View of the port of Muscat and its forts, with ships in the foreground; beneath, $\frac{1}{12}$ ANNA. Around the edge, in English, SULTAN FESSAL BIN TOORKY. 1311. IMAM OF MUSCAT & OMAN.

Reverse, Within a wreath an Arabic inscription (translated): *The Sultan Fessul bin Tourki bin Sayid bin Sultan, Imam of Muscat and Oman*. At the bottom, 1311 (=1893), and at the top, *Ghazni*—probably the denomination of the piece.

2. QUARTER ANNA, 1311. *Obverse*, Same as above except $\frac{1}{4}$ ANNA.

Reverse, Same as above except an undecipherable word, probably *Bisr*, in place of *Ghazni*.

3. QUARTER ANNA, 1312. *Obverse*, In the centre an Arabic inscription—*Struck at Muscat*, 1312, and in English, $\frac{1}{4}$ ANNA. Around the border in English, FESSUL . BIN . TURKEE . IMAM . MUSCAT.

Reverse, Within a wreath an Arabic inscription—*Fessul bin Tourki bin Sayid bin Sultan, Imam of Muscat and Oman*. This piece is of crude workmanship.

4. QUARTER ANNA, 1312. *Obverse* and *Reverse*, Same as 3, but there is no inner border line, and IMAM is spelt IMAUM.

5. QUARTER ANNA, 1312. *Obverse*, Similar to 4, but the inscription reads, FESSUL BIN TURKEE IMAM OF MUSCAT AND OMAN.

Reverse, Similar to 4. The workmanship of this piece is much better.

6. QUARTER ANNA, 1312. *Obverse*, Same as 5.

Reverse, Similar to 5, but there is no wreath around the inscription; a deeply dentilated border.

7. QUARTER ANNA, 1313. *Obverse*, Same as 5, but dated 1313.

Reverse, Same as 5.

8. QUARTER ANNA, 1313. *Obverse*, Same as 5.

Reverse, Same as 6.

9. QUARTER ANNA, 1313. *Obverse*, Same as 5.

Reverse, Same as 2, and with the date 1311.

10. QUARTER ANNA, 1314. *Obverse*, Similar to 5, but the outside inscription begins at the top, the date is 1314, and the fraction ($\frac{1}{4}$) is under ANNA instead of at the left.

Reverse, Same as 5.

11. QUARTER ANNA, 1315. *Obverse*, Similar to 5, but the outside inscription begins at the top, and the date is 1315.

Reverse, Within a wreath an Arabic inscription — *Fessul bin Tourki, Sultan of Oman*.

12. QUARTER ANNA, 1315. *Obverse*, Same as 11, but the date smaller. Crude work.

Reverse, Similar to 11, but a star above the inscription.

13. QUARTER ANNA, 1315. *Obverse*, Similar to 11, but the inner border is composed of dots; the date is very small. Crude workmanship.

Reverse, Similar to 11.

14. QUARTER ANNA, 1315. *Obverse*, Similar to 5, but with the date 1315. The inscription begins at the bottom.

Reverse, Similar to 12.

15. QUARTER ANNA, 1315. *Obverse*, Same as 14.

Reverse, Similar to 13.

HOWLAND WOOD.

THE MEDALS, JETONS, AND TOKENS ILLUSTRATIVE OF THE SCIENCE OF MEDICINE.

(Continued from Vol. XLVI, p. 72.)

XII. AUSTRIA (continued). B. 3. *Medical Societies*. (Continued.)

Vienna (continued). Hygienic Exposition, 1894.

2751. *Obverse*. Military bust, facing and to right. Inscription: ERZHERZOG FRANZ FERDINAND V. OESTERR. — ESTE PROTECTOR

Reverse. Upon a circle of cornucopiae, bearing fruit and interlaced by laurel, an irregular cartouche, upon which: INTERNATIONALE | AUSSTELLUNG | FUER | VOLKSER-
NAEHRUNG HYGIENE | MILITAER-VERPLEGUNG | UND | RETTUNGS WESEN | WIEN | 1894 |

* Exergue: W. PITTNER

Bronze, aluminum. 26. 42mm. In the Boston collection.

2752. *Obverse*. As preceding.

Reverse. Allegorical group.

Silver. R. Ball Cat., Oct., 1905, No. 1626.

Do. Do. Do. 1906.

2753. *Obverse*. Bust, facing, of Grand Duke Leopold Salvator.

Reverse. Two figures, with rotunda in background.

Bronze. 38. 60mm. By A. Hartig. Kallai Cat., 1908, p. 1705.

Do. VIth International Anti-Tuberculosis Congress, 1907.

2754. *Obverse*. In upper right corner, upon sunken medallion, head of Emperor Franz Josef, to left; ascending towards this, seven crowned and laureated maidens, bearing torches, flowers, and laurel and oak branches. In background, mountains and

the rising sun. Below, flowers and crossed palm and laurel. At left, above: VIRIBUS | UNITIS Upon lower right edge: TONY A. SZIRMAI 1905

Reverse. Upon a medallion, Hygeia erect, with serpent on arm, and behind her oak branches, presenting medicinal plants to a seated and laureated female with tablet, upon which: PAX | — | LABOR | — (incused); behind her a laurel branch. In background, between two fluted pillars: WIEN | 1907 and beneath, a hanging scroll bearing: DOMINUS | ADJUTOR (incused.) At left: VI^a | CONFERENCE | INTERNATIONALE | CONTRE LA | TUBERCULOSE Below the medallion, upon an ornate panel in front of crossed branches of palm and laurel: PARTICIPATION | DES | ETATS UNIS At both upper corners, an antique lamp, obliquely.

Silver, bronze. 32 x 44. 50 x 70mm. There are twenty-one varieties, distinguished by the panel upon reverse, according to the countries represented at the Congress. *Num. Circular*, March, 1912, p. 13848, fig. of obverse. In the Boston collection, the gift of the artist, Mr. Szirmai of Paris, and in the Jacobs collection.

Do. 1st International Laryngo-Rhinological Congress, 1908.

2755. *Obverse.* At left, a semi-nude old man, seated, with right arm flexed on chest and head thrown back, before whom an erect female with tongue depressor in right hand and circular mirror with taper in left. The city of Vienna in background. Upon lower left margin: R · MARSCHALL

Reverse. Two heads. Above that at left: TVERCK; below: GEB: | 22 · JVLI | 1810 | GEST: | 25 · FEBR · | 1868 Above the other: CZERMAK; below: GEB: | 17 · JVNI | 1828 · | GEST: | 16 · SEPT · | 1873 Beneath all, a laurel wand bound by ribbon. Underneath this: ERSTER INTERNAT · | LARYNGO-RHINOLOGEN | KONGRESS | WIEN 1908

Bronze. 28 x 36. 48 x 60mm. Upper corners truncated. Upon the fiftieth year from the discovery of the laryngoscope. In the Boston collection, the gift of Dr. F. P. Weber of London.

Do. Pharmaceutical Society of Austria.

2756. *Obverse.* Hygeia, to left, with serpent and patera. Inscription: OESTERR. PHARMAC. GESELLSCHAFT

Reverse. ZUR | ERINNERUNG | AN | XXV JAHRE | MITGLIEDSCHAFT

Bronze. 18. 29mm. *Num. Zeitschrift*, XXXVI, 1904, p. 182, pl. X, fig. 21, of obverse.

Do. Medical Society of Vienna.

See Dr. A. Hoffman, No. 2548.

Do. Society of the Southern Medical Districts.

See Dr. Adler, No. 2472.

C. Medical Events.

Death of Count Günther von Schwarzburg¹ from poison, 1349.

2757. *Obverse.* Laureated head to right.

Reverse. Inscription in nineteen lines, with more upon rim.

Silver. 32. 50mm. Helbing Cat., 17 Nov., 1902, No. 1558.

Recovery of Emperor Karl V from paludal fever at Milan, 1550.

2758. *Obverse.* Laureated bust to right, with toga. Inscription: IMP. CAES. CAROLVS · V AVG

¹ Antagonist of Karl IV. Chosen Roman Emperor. Frankfort physician, Freidank. The poison was supposed to have been given by the

Reverse. Hygeia erect, with staff of Aesculapius, sacrificing at altar encircled by serpent. At right, recumbent, a river-god (the Ticino) with flowing urn. Inscription: SALVS · AVG - VSTA Exergue: PALVS · MLI

Silver. 25. 38mm. In the Boston collection.

2759. As preceding, save: PADVS · MIN ·

Van Mieris, II, p. 310, fig.; Armand, II, p. 181, No. 4.

Confinement of wife of Emperor Josef I, 1700.

2760. *Obverse.* The empress in bed. Legend: FÆCUNDITATE — AUGUSTÆ

Reverse. Angel with cradle. Legend: IN PROLEM TRANSCVRRA GLORIA PATRVN

Upon rim: DI PATRII (etc.)

Silver, tin. 28. 42mm. By Hautsch. *Num. Verkehr*, Jan., 1910, No. 1819.

Pregnancy of Elizabeth, wife of Karl VI, 1717.

2761. *Obverse.* Bust of the emperor, to right.

Reverse. Crown and cushion. Legend: CLARITAS VTRIVSQ. GENTIS.

Silver. 20. 29mm. Helbing Cat., 17 Nov., 1902, No. 2398.

Do. Do. 1723.

2762. *Obverse.* Two laureated busts. Beneath: A. v(estner). Inscription: CAROL. VI. CAES. AVG. G. H. H. B. REX. ELIS. CHR. AVGVSTA G. H. H. B. REG.

Reverse. The emperor and empress seated, with emblems of royalty, etc. Beneath: v. Legend: TENET LONGVMQVE TENEBIT. BOHEMAS ARCES SANGVIS TVVS. Exergue: CORONATIS AVGVSTIS SVCCESIONE FIRMATA MDCCXXIII.

Silver, tin. 25. 38mm. Lochner, IV, vorrede, No. 30.

2763. *Obverse.* Two busts, with wreaths. Above, a crown. Legend: DVABVS CORONIS VNA CORONA IMPONITVR (1723.)

Reverse. The city of Prague. Inscription: REGE CORONATO DABIT ALMA BOHEMIA NATVM.

Silver, tin. 28. 42mm. *Ibid.*, No. 31.

2764. *Obverse.* Within a triangle, two united hearts, crowned, above, a smaller one. Legend: OMNE - TRINVM - PERFECTVM Exergue: GRAVIDITAS AV | GVSTAE MDCCXXIII

Reverse. I. | AVGVSTVS CAROLVS | II. | FVLGENS DIADEMATE ELISA | PERFECTA VT TRIA SINT. | III. | ARCHIDVCEM | ACCIPIENT.

Silver, tin. 20. 32mm. *Ibid.*, No. 32. In the Boston collection.

2765. *Obverse.* Two heads. Inscription: CAROLI VI · CAES. AVG. G. H. H. B. REX. ELIS. CHR. AVGVSTA G. H. H. B. REGI. | A. R. ·

Reverse. DEO FORTVNATE | CAROLO | ET | ELISABETHA | GRAVIDA | PRAGÆ | REDEVNTIBVS - (1723.)

Silver. 25. 37mm. Poulharies, p. 98, No. 94.

2766. *Obverse.* A crowned two-tailed lion to left, holding a large crown. Legend: GOTT BEGLEITE DIE BOHEMISCHE KRONE Exergue: PRAG 5 U. 8 SEPT. | 1723.

Reverse. The emperor and empress, crowned, holding a crown over a boy. Legend: MIT EINEM ERTZ HERTZOGLICHEN SOHNE. Exergue: 1724

Silver. 15. 25mm. Donebauer, No. 2689. In the Boston collection.

Newport, R. I.

HORATIO R. STORER.

PRIVATE GOLD COINAGE:—CALIFORNIA.¹

VII.

(Continued from Vol. XLVI, p. 70.)

THE private gold coins struck in California from 1849 to 1855 inclusive, which passed as money, form one of the most interesting series of pieces that have ever been issued in this country; for they were intimately connected with a time which, with the exception of the Wars of the Revolution, of 1812, and of 1861, was one of the most sensational in our national history. The discovery of gold in California and the development of its mines during one of the most stringent financial periods through which this country has ever passed abruptly ended what has since become proverbial as the "Hard Times." The enormous product of the precious metal thus thrown upon the markets of the world, immediately placed our country on that solid and prosperous basis which it has ever since maintained, for the achievement of this result was unquestionably due to the yield from the California mines more than to any other single agency.²

The "Days of '49" are recalled by no more emphatic reminders than the gold pieces of various denominations, issued at that time and now so carefully treasured by our numismatists; the study of these pieces and a search for the details of their origin bring to light many interesting and important facts which have become submerged by time. The reason for striking the famous octagonal Fifty Dollar slug, that mute yet eloquent relic of the great bonanza days, is only revealed by a study of the newspapers of the period. The first issue of private gold in California was evidently suggested by some one familiar with similar pieces, or who had been engaged in making them in Georgia or North Carolina. Gold bearing private stamps of various denominations had been coined as early as 1830 by Templeton Reid, an assayer located near the gold mines of Georgia; his example was followed in 1831 by Christopher Bechtler at Rutherfordton, N. C., and the latter was still operating at the time of the great California discoveries in 1848, while Reid (though from what can be learned, his private mint was then no longer in operation) was contemplating the transfer of his business to California, the evidence for which is furnished by the Ten and Twenty-five Dollar pieces bearing his name and CALIFORNIA.

The right of private persons to issue gold coins had never been seriously questioned by the Government authorities; the Bechtler mint, for example, was in full operation long after the regular United States Branch Mint had begun business at Charlotte, N. C.; when therefore California felt the need of such an issue, to replace the common currency of gold-dust, no one disputed the right of the private mints to supply it. This need became imperative in the summer of 1848, when there was little or no gold or

¹ Copyright, E. H. Adams, 1912.

² In giving a *résumé* of the circumstances which led to the origin, development and final discontinuance of the private gold coinage of California, the chronological order has been followed as far as feasible. Copies of original documents (not already printed) on which the statements in this series of papers are based, are

given, but descriptions of the pieces are omitted here; they are printed under the sketches of the coiners. Occasional repetitions, which however seemed necessary to a clear understanding of the subject, will be noticed, but these have been condensed as far as possible, and references given to more extended accounts in the text.

silver coin with which to pay Customs duties, and Governor Mason was asked to provide some means of relief. He at once instructed the Collector to receive gold-dust at its then intrinsic value — \$16 to the ounce. Soon learning, however, that this was a violation of the United States law, which specifically provided that Customs duties should be payable only in coin, he was forced to revoke the order, but permitted the merchants to deposit their gold-dust at the Custom House at the rate of \$10 an ounce, with the privilege of redeeming it in the prescribed coin within sixty days; otherwise it was sold at auction, and as such coin was almost unobtainable, they were compelled to stand hopelessly by and see their gold-dust, which was worth more than \$18 an ounce at the Philadelphia Mint, sold at from \$6 to \$8 an ounce to the highest bidder — in most cases to a speculator who had somehow come into the possession of acceptable coin.

The following order for disposition of the gold-dust, if not redeemed, shows the attitude of the authorities :

STATE DEPARTMENT, TERRITORY OF CALIFORNIA.

Monterey, September 10, 1848.

Sir:— . . . As soon as the time of redemption of the gold-dust in your hands received on deposit as security of the payment of duties expires, you will give due notice, and sell it at public auction. In order that there may be no loss to the revenue, you will bid it in at the value for which it was deposited. If it sells for more, the surplus, after the expenses of sale are deducted, will be paid over to the depositors. The gold-dust received in payment of duties, with the privilege of redemption, of course becomes the property of the United States if not redeemed at the expiration of the time specified, without any sale.

Respectfully, your obedient servant,

H. W. HALLECK,

Lieutenant of Engineers and Secretary of State.

Captain J. L. FOLSOM,
San Francisco, California.

July 22, 1848, the San Francisco merchants met to devise means to protect themselves against this heavy loss, and passed Resolutions requesting the Governor to extend the privilege of redemption to a maximum period of six months; he replied that he would instruct the Collector to receive gold-dust for duties, allowing the owner to redeem one-half with gold or silver coin at any time within ninety days, and the other half by a like payment within one hundred and eighty days; but this was to be merely a temporary agreement, due to the scarcity of coin. He would gladly comply with the wishes of the citizens by making the whole redeemable as desired, but this would virtually cut off the customs receipts for six months, and be too much of a departure from his instructions to collect the duties in gold and silver coin exclusively. In his letter the Governor (Col. Richard B. Mason) said:—“ . . . Although I am ordered to collect [the duties] in cash, provided the gold-dust is taken at a rate low enough to make it certain that the merchant will redeem it at the stipulated time, and, if he does not, that there will be no doubt that the duties can be realized at once by putting it up at auction, if the money be immediately required,” he would direct the Collector to receive it, and continues :

You will readily perceive the situation in which I am placed. A large amount of duties will be received at San Francisco. Should some ten or twenty thousand dollars of this gold-dust received at the Custom House, reckoning at the rate per ounce at which it will be received, fail to be redeemed

at the stipulated time, and I should be forced by the want of funds to throw suddenly this large amount into market to be sold for cash, and it should not bring this sum, I at once become and am held personally and individually responsible and accountable to the Department at Washington for the loss sustained in consequence of the departure from my orders and instructions.

I am very sure that none of the merchants of your town would desire to see me assume a risk of becoming pecuniarily involved by departing from my instructions for their accommodation; and therefore I feel, by departing from my orders in this instance, in permitting goods, wares, and merchandise to go at once into the market, and waiting three and six months before the duties can be realized, that the precautions I take to guard both the public and myself from any loss are not unreasonable or greater than the occasion calls for.

I shall strongly recommend, in my first communication to the Department, the immediate establishment of a mint in Upper California.

R. B. MASON,

Colonel 1st Dragoons, and Governor of California.

As every piece of coined money, whether of gold or silver, was hoarded by importers to pay duties, there was the greatest scarcity of currency in the ordinary channels of trade. When this became evident, a stream of gold and silver coins of all nationalities and denominations began to flow toward California; there were the Spanish and Mexican Dollars, or Ounces, with their fractions, and the Dollars of Peru, Ecuador and Bolivia, nearly all of superior value and held above par. To these were added great numbers of French Five Franc pieces, intrinsically worth but ninety-three cents, yet passing (except at the Custom House) for One Dollar. For a fractional currency, all kinds of minor silver coins were accepted, and an immense flood of Spanish Pesetas, French Francs and Austrian Zwanzigers soon found its way into circulation; none of these had an intrinsic value of even twenty cents, but as nothing could be purchased for less than "two bits," or twenty-five cents, all silver approximating the size of an American Quarter passed for that amount, and because of these peculiar conditions coin speculators reaped a rich harvest.

Certain silver coins were equally acceptable with those of gold for duties, and the spectacle was daily presented of a merchant paying a premium in gold-dust for silver to remove his goods from the Custom House. Silver was also required for purchases in China; under no conditions would the Orientals accept gold for their merchandise, and thus the San Francisco buyers were compelled to pay a premium in gold for silver coins in another instance—a remarkable example of the important part played by that now despised metal in this greatest of the days of gold.

As the supply was so extremely limited, it was then proposed that private assayers issue gold pieces to fill the need, as had been done in other parts of the United States under similar circumstances of necessity, and which might be used as a substitute for dust. We find the first suggestion of such a coinage in a letter to the Governor, dated July 27, 1848, in which a number of San Francisco's prominent citizens, among whom were Walter Colton, Talbot H. Green, J. S. Ruckle, Thomas O. Larkin, C. Wooster, Milton Little, J. Spence and Jose Abrigo, outlined the embarrassing state of affairs caused by the lack of a suitable currency, and requested him to sanction such an issue. On the following day the Governor replied:

HEADQUARTERS TENTH MILITARY DEPARTMENT,
Monterey, California, July 28, 1848.

Gentlemen: I have the honor to acknowledge the receipt of your communication of yesterday's date. Under the circumstances you mention, and which are so well known to me, — the almost entire absence of gold and silver coin — I have no hesitation in saying that, if the California grain gold, now in such abundant quantities in the country, can be wrought into convenient shapes, so as to answer as a substitute for gold and silver coin, I will order it to be received at the Custom House in payment of duties, at its intrinsic value.

I am, respectfully, your obedient servant,

R. B. MASON,
Colonel 1st Dragoons, Governor of California.

Before the petitioners had time to act under this authority the Governor learned that his order was illegal, and on August 8, 1848, revoked the permission in the following letter :

HEADQUARTERS TENTH MILITARY DEPARTMENT,
Monterey, California, August 8, 1848.

Gentlemen: — In my letter of the 28th of July, replying to yours of the day previous, you were informed that "if the California grain gold could be wrought into convenient shapes, so as to answer as a substitute for gold and silver coin, I would order it to be received at the custom-house in payment of duties, at its intrinsic value." By reference to the Act of Congress, approved August 6, 1846, you will see that it would be manifestly illegal for me to do so. I was not aware of all the requirements and prohibitions of that Act, at the date of my letter above mentioned.

I am, respectfully, your obedient servant,

R. B. MASON,
Colonel 1st Dragoons, Governor of California.

Messrs. Walter Colton, T. H. Green, J. S. Ruckle, T. O. Larkin, C. Wooster, Milton Little, J. Spence, and J. Abrigo.

On September 9, 1848, the greatest public meeting ever held in California up to that time assembled in San Francisco to fix a definite value for gold-dust. Dr. T. M. Leavenworth was Chairman, and J. D. Hoppe Secretary of the meeting. As this was a matter of vital importance to the miners, they came in great numbers from all parts of the State. As a result the current value of gold-dust was settled upon at \$16 per ounce, but much dissatisfaction was felt at this decision, for it was well known that good California raw gold was worth \$18 and more, per ounce.

Early in 1849 the private issues began to appear, releasing the coins hoarded for duties and providing a means by which the miners received considerably more for their dust than the established rate. It is difficult to determine the exact date of their advent, but undoubtedly there were none struck for circulation before 1849. "The Digger's Handbook," published at Sydney, New South Wales, evidently early in that year, stated :

There is no coinage in the country. A Company, however, has been formed, which has imported from the United States all the material necessary for striking coins, and it is doubtless at the present time in full operation ; that is, if it has succeeded in procuring coal to carry on the works, for wood is here much too dear for the purpose.

There is proof that a private gold coin had made its appearance at least before May 31, 1849, for the "Alta California" of that date mentioned a "Five Dollar gold coin, struck at Benicia City, though the imprint is San Francisco. . . . It bears the private stamp of Norris, Gregg & Norris." ¹ Moffat & Co., who were doing an assaying and gold brokerage business in San Francisco during the summer of 1849, issued rectangular ingots of gold, which passed current in place of circular coins, and in the latter part of July or the first of August, a circular Ten Dollar piece appeared, bearing their private stamp, the first of that denomination to be struck in California and the second coin made in that State from native gold by private coiners, the Five Dollar piece above mentioned alone being earlier. The closing months of 1849 saw a perfect avalanche of private gold. Every big Company coming from the East, says one pioneer, brought machinery for coining. Many of their issues were of greatly varying value, and bore interesting and original devices, and some followed the types of the regular coinage so closely that careful scrutiny was required to distinguish them.

To swell the total came two intruders from neighboring territories — the wonderfully debased "Great Salt Lake City Pure Gold" pieces (the net value of the Twenty Dollar piece being only a little over \$17) of curious designs, struck by the Mormons, and Five and Ten Dollars of Oregon, much better in quality and held at par. The Miners' Bank Tens were intrinsically worth \$9.87; the Ormsby Tens, \$9.37; the Pacific Company's pieces, \$4.48 and \$7.86 respectively; the Cincinnati Mining and Trading Company's coins were valued at \$4.95 and \$9.70; the Ten and Twenty-five Dollars of Templeton Reid at \$9.75 and \$24.50; the Moffat Tens at \$9.77.7, and the Half Eagle of Norris, Gregg & Norris about \$4.90.

These were the coins with which the early Californians had to do business, and many of them speedily fell into disrepute: — first, the Mormon coins, which were refused by all, when their spuriousness was once revealed; the Miners' Bank gold next came into disfavor, and was only accepted at twenty per cent. discount. Both issues were soon driven from circulation, and those who owned them were forced to sell them at their bullion value and pocket the loss. Many others ceased to appear in 1850, among them those of the Pacific, the Massachusetts and California, the Cincinnati Mining and Trading Companies, the Ormsby, the Norris, Gregg & Norris and the Templeton Reid pieces. Those of Moffat & Co. alone survived the struggle of 1849 — that is, they were the only ones which bear the date of 1850 that were struck by firms minting private coins in the previous year. Two new concerns were however added to the roll — Baldwin & Co. and Dubosq & Co. — while Frederick D. Kohler, the newly appointed State Assayer, began the issue of rectangular ingots of specified but greatly varying value, which served the purpose of a circulating medium.

The offspring of the mints that had ceased coining still continued to clog the wheels of business, though many of the pieces had an intrinsic value very close to that stamped upon them. The private issues had doubtless been of great value at a critical time, increasing the value of raw gold, but some coiners, not satisfied with a fair profit, had debased their products to such an extent that suspicion fell on the whole series and stirred the business men into action to provide some plan for relief. The result was that

1 See the *Journal*, XLV: p. 47.

at the session of the State Legislature held at San Jose in 1849-50, Mr. Woodworth, one of the members, introduced a bill in relation to such coin, which he termed "counterfeit," as follows :

Whereas, Certain persons have made or caused to be made and circulated pieces said to be of gold of various denominations, and since the issue and circulation of said pieces representing coin the persons so causing such coin to be made and circulated have refused to redeem the same in legal money of the United States, thereby imposing on the people of this State a large amount of spurious coin, some of which being made in such close imitation of the coin of the United States so as to deceive the ignorant as to its proper character.

Whereas, The making and circulating of pieces of metal representing the coin of the United States is in direct violation of an Act of Congress, and subjects the maker or passer of such coin to the penalty imposed upon coiners and counterfeiters, and whereas great loss has been sustained by holders of this spurious coin, Therefore,

Be it Resolved, By the Senate and Assembly of California, that all such persons as have made or caused to be made and circulated such representations of money be compelled by this Act to redeem all such pieces of coin or money as they may have issued or caused to be issued, within thirty days after the passage of this Act. And all such persons refusing to redeem the same within the time prescribed by the law in good and lawful money of the United States, and all persons who shall hereafter make or cause to be made, or issue or cause to be issued, any "tokens," coins, or pieces of metal or other substances representing money, shall be guilty of a misdemeanor and subject to such penalties as are imposed by the laws of the United States upon counterfeiters and coiners.

This bill, which was printed in "Alta California," January 26, 1850, seemed to meet the existing conditions so adequately that it drew forth a long editorial on the same date, disapproving private coinage and suggesting that the system be discontinued. The writer said :

It is well known that a great variety of pieces, presumed to be gold, have been issued in San Francisco and the river towns, of various denominations or value, from \$5 to \$10, or stated to be of that value, and thrown into active circulation. When they were first coined no serious objection was entertained against them, but they were rather regarded as a matter of convenience, the amount of current coin in the country being extremely limited, while "dust" was abundant. It was also given out by the parties issuing these pieces that they would be redeemed, upon presentation, with current coin of the United States at par. Subsequently it was announced that they would be redeemed with dust only. They were regarded at the Custom House as an illegal tender, and were refused in payment of duties, and at the Post-office were not received in payment of postage. Many mercantile firms have denied them, and none of the brokers would take them at their par value. This state of things exists at the present time. They are looked upon with suspicion and distrust. Issued by individuals or self-constituted banking institutions, the public have no evidence, other than the asseveration which they bear upon their face, of their value or of their purity. That they are perfectly illegal is clearly manifest, if not absolutely counterfeit coins. It has been contended by many persons that according to the strict construction of the law they are absolutely counterfeits of the United States coins, as it is not necessary that they should be of the exact similitude of the legalized coin of the United States Mint. They purport to be of the same value and weight, and are of the same size and general appearance as the standard coin. We coincide with this view of the matter, and are decidedly of the opinion that they come within the full meaning of the law. That the "tokens" that have been issued are of the value they profess to be we do not mean to question. We believe them to be so, but we cannot countenance a system which, if suffered to exist any longer, will be the cause of defrauding the community to the greatest extent.

This bill and the editorial comment elicited a strong reply from Moffat & Co., which is given below :

The Resolution offered in the House of Assembly by the Hon. Mr. Woodworth, in regard to the issue of coin by individuals, and your remarks thereon, published in Saturday's edition, have met our observation, and as we are engaged in the manufacture of \$5 and \$10 pieces we beg leave to use your columns through which to offer some vindication of our character and standing from the charge of being counterfeiters and open violators of the laws of the United States, and to assure the public that whenever Congress shall enact laws forbidding the manufacture of gold into pieces representing coin by individuals, we shall bow with the greatest respect to such law.

Private mints have been in operation for many years in the United States, and have been the subject of consideration and complaint by the Director of the Government Mint in his reports to Congress. The establishments for this purpose have been that of Templeton Reid of Georgia, now discontinued, and that of Christopher Bechtler in North Carolina, still in operation. This mint is located at Rutherfordton, N. C., and is of considerable importance. Its operations were commenced in 1831, and are still carried on, although there is a Branch Mint of the United States less than eighty miles distant. Mr. Bechtler has stated the amount of his coinage to February, 1840 (nine years), at \$2,241,890.

An assay of the coinage of Mr. Bechtler by the Mint of the United States developed the fact that his \$5 pieces on the average were worth but \$4.84, and this practice is still going on in the United States, not only where the necessity does not exist for want of a circulating medium, but directly at the portals of the Mint of the United States; and nothing is done to prevent it by the public authorities because no law forbidding it exists. The Director of the Mint, in his Report to Congress for the year 1840, after a brief statement in relation to Mr. Bechtler's coinage, observed: 'It seems strange that the privilege of coinage should be carefully confined by law to the General Government, while that of coining gold and silver, though withheld from the States, is freely permitted to individuals, with the single restriction that they must not imitate the coinage established by law.'¹ We cannot but believe that had there existed any law against the coining operations of Mr. Bechtler or other individuals, the Director of the Mint, and those upon whom it devolved to see that so important an interest of the United States should be protected, would have enforced it. But we do not place ourselves in the category designated in the Resolutions referred to. We aver that we have violated no law of the United States in regard to coining money; that we have defrauded no man of one cent by the issuing of our coin; that we have in no instance refused or failed to redeem in current coin of the United States all of such issues without detention or delay, and we hold ourselves ready now and at all times hereafter to do so. We have too high an opinion of the wisdom and good sense of the Legislature of this State to believe that they will pass any Act in pursuance of the Resolutions referred to, as the subject belongs only to Congress, and is not usurped or interfered with by any of the State authorities. In regard to the value of our coin, we assert, and submit it to the test of any assaying establishment, that each piece is worth more than it purports to be, and will pay a handsome profit to any one who will take them to the Government in bullion.

While upon this subject we beg your permission to say a few words in regard to another source of complaint by some, in connection with our business. We refer to the bars or ingots prepared for merchants, bankers and others, for export. We have been called on in some instances to redeem such in current coin, because our name, together with the carat, and weight, is stamped thereon; the unreasonableness of this requirement must be manifest to every reflecting person. We receive from a banker, merchant, or miner 62½ ounces (\$1000) of dust, with a request to put it into bars, and stamp it with its true value, according to our Government standard, and for this service we receive fifty cents per ounce.

¹ It will not escape the reader's notice that while Moffat & Co., by this quotation, acknowledge that they were aware that coiners "must not imitate the coinage established by law," they entirely ignore, in their reply, the fact that their \$5 and \$10 pieces very closely imi-

tated the national coins of those values — the chief difference, to the ordinary observer, being in the legends alone. The various Bechtler issues and those of Reid, on the contrary, bore no resemblance to United States money.

After having performed our labor, delivered the bars, and received our \$31.25, the banker modestly demands of us the amount of his bar in current coin. To be sure, we have been benefitted, after paying our expenses, perhaps \$15, by the patronage of our friend, and with this benefit he asks us to pay him the mint value of his bar, because we have asserted by our stamp that it contains so many ounces, and is of such a carat fine, and is therefore worth at the Mint in dollars and cents so much money. The absurdity of such a demand must be apparent. We hold ourselves responsible for the accuracy of our stamp, whether it be upon bullion or in the form of ingots or coin. If there be error the party aggrieved has his remedy at common law.

If we are counterfeiters the criminal courts are at all times open. Our guilt or punishment cannot be affected by any action of the State Legislature. We shall endeavor to pursue such a course in our intercourse with our fellow-citizens as not to impose on their rights, or outrage laws and good order; and while we thus deport ourselves we claim to be exempt from the unjust charge of being felons and counterfeiters by those who ought not to plead ignorance of the law in extenuation of their acts.

MOFFAT & Co.

The falling off in the number of private coiners in 1850 was due in part to the rejection of so many issues of the preceding year and the growing uneasiness as to the intrinsic value of some of the pieces in general circulation, but most of all to the passage of a prohibitory Act on April 8, 1850, by the State Legislature, which put an end to the business for the time. The chief provision of this Act reads as follows:—

Any person who shall stamp or impress, or shall cause to be stamped or impressed, upon any piece of gold of less than four ounces Troy weight, whether pure or alloyed, any figures, letters or marks, indicating or purporting to indicate its weight, fineness or value, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished as provided in the preceding section.

A few days later (April 20) the law establishing the office of State Assayer and prescribing his duties was passed,¹ and the same day another law, which compelled private coiners to redeem their issues on demand, at face value, was also passed, which virtually forced them out of business. The text of this law follows:—

SEC. 1. Any person or company who shall make or cause to be made, within this State, any piece of gold or silver, whether pure or alloyed, in the form of coin or otherwise, and intended or calculated to circulate as money, shall be held responsible to the holder thereof for the marked value thereof, or at the rate at which such coin is uttered, and shall on presentation redeem all such coins at such rate with legalized coin of the United States.

SEC. 2. If any person making or uttering such coin shall refuse or neglect to redeem the same in the manner prescribed in Section 1, he shall be deemed guilty of a misdemeanor, and shall be liable on conviction to be punished in each case by fine of not less than five hundred dollars, nor more than five thousand dollars, or imprisonment for not less than six months, nor more than three years, or by both such fine and imprisonment.

SEC. 3. If any person shall hereafter make or utter any piece of gold or silver as described in Section 1, without stamping upon the same the day, month, and year of its manufacture, he shall be guilty of a misdemeanor, and shall be liable on conviction thereof to the same penalty as prescribed in Section 2.

SEC. 4. If any person shall hereafter make or utter any coin, or piece of gold or silver, such as is described in Section 1 of this chapter, of less value than its marked or nominal value, or the value at which it is issued, he shall be deemed guilty of fraud, and on conviction thereof shall be liable to the penalties mentioned in Section 2.

SEC. 5. This Act shall take effect on the fifth day after its passage.

¹ For the full text of this law see the *Journal*, XLV: pp. 14 *et seq.*

The question of the establishment of an official Assay Office, at which gold-dust could be smelted, assayed, and stamped with its value, had been discussed as early as July 22, 1848, and at the Constitutional Convention in 1849, Mr. Stewart introduced a Resolution expressing the desire,

That the Congress of the United States establish an Assay Office at the most suitable place, where all gold-dust intended for exportation shall be assayed, made into ingots or bars, and stamped with its rate of purity on payment of a charge not to exceed one per cent.; the holder of any such ingot, however, to have the right to have the same coined free of further charge, on presentation at any Mint of the United States. The net proceeds of said Office to be paid into the Treasury of the State of California.¹

This Resolution was rejected by the Convention.

The United States Assay Office had its origin in the fact that when Senator Dickinson of New York proposed that a Mint be established in that city, Senator Benton offered an amendment that a Mint and Assay Office be established in San Francisco. This failed to pass, but at the next session a substitute for the Bill was offered, and in the meanwhile Moffat & Co. became assay contractors. Congress authorized the appointment of a United States Assayer on Sept. 30, 1850; the Act provided that

The Secretary of the Treasury be . . . authorized and directed to contract, upon the most reasonable terms, with the proprietors of some well-established works now in successful operation in California, upon satisfactory security, to be judged by the Secretary of the Treasury, who shall, under the supervision of the United States Assayer, to be appointed by the President by and with the advice and consent of the Senate, perform such duties in assaying and fixing the value of gold in grains and lumps, and forming the same into bars, as shall be prescribed by the Secretary of the Treasury; and that the said United States Assayer shall cause the stamp of the United States, indicating the degree of fineness and value, to be affixed to each bar or ingot of gold that may be issued from the establishment; provided, that the United States shall not be held responsible for the loss of any gold deposited with said proprietors for assay.

Early in March, 1851, Mr. Heydenfeldt, of the State Legislature, introduced a Bill to repeal the Act of April 8, 1850, prohibiting coinage by individuals, and according to "Alta California," of March 9, Mr. Murphy of the Committee on Ways and Means, reported it to the House, and it passed, after some debate, only needing the Governor's signature to become a law. On the appointment of the United States Assayer, who began operations about the first of February, 1851, the State Assay Office was discontinued. Moffat & Co., who had obtained the contract with the National Government, abandoned their private issues and took up the exclusive work of striking the Fifty Dollar "slugs." Two other firms joined the mints which had been doing business in 1850: these were Dunbar & Co., and Shultz & Co., each of whom struck coins of the single denomination of Five Dollars, very much alike in design, and having the firm name on Liberty's coronet. Baldwin & Co. ceased to issue Fives, but began to coin Tens and Twenties, — the latter the first of that value to be struck.

The Act of April 8, 1850, seems to have speedily become a dead letter, for never was there a larger volume of this coinage than in the first quarter of 1851, when each

¹ See Proceedings of the State Convention in 1849, p. 347.

mint seems to have been worked to its greatest capacity. Baldwin & Co. led, with a total product of \$590,000 from January 1 to March 31: the output of the new United States Assay Office was \$530,000; Dubosq & Co. were third, with a coinage of \$150,000; Shultz & Co. struck \$93,000 in Fives, and Moffat & Co., in the twenty-seven days before they ceased coining to begin the work of the United States Assay Office, had struck \$89,000 — probably in Fives, though no pieces of this mintage dated 1851 are now known.¹

With all this flood of private coins there was evidently an under-current of distrust as to the actual value of some of the pieces, compared with that stated on their face, and one of the most prominent banking firms was determined that if possible this emergency coinage should be placed on an honest basis.² The evidence for this is found in the following correspondence between James King of William and Augustus Humbert, U. S. Assayer:

BANKING HOUSE OF JAMES KING OF WILLIAM,
San Francisco, March 21, 1851.

Dear Sir: Herewith I send you samples of the following coinage, viz.:

Baldwin's	13	Twenties.....	\$260
"	10	Tens.....	100
"	28	Fives.....	140—\$500
Shultz's	45	Fives.....	225
Dubosq's	7	Tens.....	70
"	3	Fives.....	15— 85

May I ask you the favor to have these assayed and let me have the result as early as you conveniently can, and oblige,

Yours very truly,

JAMES KING OF WILLIAM.

Augustus Humbert, Esq., *United States Assayer, &c.*

UNITED STATES ASSAY OFFICE,
San Francisco, March 26, 1851.

Dear Sir: In answer to your letter of the 21st of March, I beg leave to state that the assays of the coins you left with me have resulted as follows:—

Baldwin's	13	pieces	\$20 ea.	516 ¹⁰ / ₃₂	871	\$19.40
"	10	"	\$10 ea.	259 ¹ / ₂	872	9.74
"	28	"	\$5 ea.	130 ¹ / ₄	871	4.91
Shultz's	45	"	\$5 ea.	129 ¹ / ₄	875 ¹ / ₄	4.87
Dubosq's	7	"	\$10 ea.	262	880	9.93
"	3	"	\$5 ea.	131	880	4.96

Very respectfully, your obedient servant,

A. HUMBERT, *United States Assayer.*

James King of William, *San Francisco.*

"Alta California," in commenting upon the result of these assays, said that it would appear that the holder of Twenty Dollar pieces would lose sixty cents on each, should he present them at the Mint, or three per cent.; while on the Tens the loss would be

¹ See *Journal*, XLV: p. 148.

² *Ibid.*, pp. 55, 187, 189.

twenty-six cents, or nearly the same percentage. The coins last named in Mr. King's list (Dubosq's) appear to approach most nearly to the United States Mint standard value, the loss being only seven-tenths of one per cent., or seven cents on Ten Dollars, while that of Baldwin is three per cent., or thirty cents on Ten Dollars.

An immediate result of this assay was the refusal on the part of the bankers to receive deposits either of ingots of gold or any other California coin except Moffat's. April 4, 1851, the business men of San Francisco met to take action on the private coinage question, and a committee was appointed to investigate the matter. The embargo must have been fairly general, as one advertiser stated that he would "receive California coin in exchange for groceries." The meeting drew from "*Alta California*" of April 5, the following editorial:

"A coin is genuine which has been issued under the regulation and authority of law; a counterfeit coin is an imitation of the genuine, struck without legal authority." — *Mint Manual of Coins*.

The difference between counterfeit and genuine coins seems explicitly enough given in the above extract from a work which, published by two Assayers at the Mint in Philadelphia, would seem to be good authority. If the definition be correct, all the private coins issued in this State, so far as we have seen them, are counterfeits. Be they so or not, their presence is becoming more and more a nuisance and an abuse of a confiding public. They are an evident imitation of the United States coins,—almost identical in appearance,—and are issued by individuals or companies professing no obligation to redeem their own issues in specie or anything else. They purport to be of a certain value, and yet, according to what appears a fair assay, and average value deduced therefrom, they fall short of their assumed value—some as much as three per cent. Our bankers, who are generally alive to their own interests, refuse to receive these coins except at a discount of five per cent. Thus the honest, confiding citizen who has taken them in good faith, finds that he cannot pay his rent, make his purchases, or deposit his hard earnings except at a discount which is considered anywhere but in California a very good rate if allowed as interest. All conceivable evils and annoyances in business transactions are felt already in consequence.

The present indications are a return to a condition of things similar to what succeeded the issuing of Miners' Bank coins, the introduction of Mormon coins, and similar operations, by which a large portion of the people who were good-natured enough to receive those vile falsehoods in the shape of coin, found themselves cheated out of twenty per cent. Most, perhaps all, of the coins now in circulation are much better than those, but the public have no security that ere a month, or at any future time, those yet to be issued will be really worth as much as were the Miners' Bank and Mormon issues. There is every reason, except such as conscience might repudiate, for alloying these coins to any extent which a determination to make money by the operation would dictate. When once a company of individuals have established the credit of their issues sufficiently to give them currency, not holding themselves under any obligation to redeem them, what is there to restrain any amount of swindling by lowering the fineness and stamping a piece of metal as worth Ten Dollars although it may not be of the value of Five? We know of nothing except a refusal on the part of the public, business men, and others, to receive this currency which is open and liable to any conceivable amount of adulteration, and consequent loss by the recipients. It is not to be expected that such issues will be maintained at their assured value, even if they should be so at first. National Governments have been known secretly to lower the standard of their coin, thus for a while at least realizing a heavy profit. An assay of a single coin or a limited number issued by companies

or individuals, responsible only to their own consciences, although it may exhibit a value equal to their face, proves nothing. These coins may have been selected or made expressly for the assay.

And more than this, although every coin issued up to the time of an assay was worth its face value, all issues the next day and ever afterward might be twenty-five or any percentage below it. For be it remembered that there is not one of the restraints of the Mint issues resting upon the private coiners. And the public ought to be able to judge how much confidence it should place in men, as we find them, when no law, nothing but self-interest, guides their operations in this matter. The business of coining here seems to be profitable. There are several establishments engaged in it, and new ones are occasionally springing up. It is rather singular if their coin is worth more than United States coins, as some assert. The assertion that it is so seems to prove too much or nothing. What conceivable object is there to make it so? If a single coin should prove so it is evidently made by mistake, or else by design be one of a few mixed for the specific purpose, to create public confidence in the entire issue upon the strength of an assay made upon one or more extra pieces. The whole system is as bad as it can well be. It is an infringement on the rights and prerogatives of the United States Government. It is an imposition upon the people of this State. Its tendency is to all manner of annoyances in business transactions, disorganization of trade, loss and vexation to the public, and lasting injury to the best interests of the community. Those who have been most instrumental in throwing this coin into circulation now refuse to redeem it or receive it except at a heavy discount. It is time that our citizens open their eyes to this great and crying evil.

We wish not to be understood as charging intentional fraud upon the persons engaged in coining. The evil lies in the system itself. Individuals cannot give permanent confidence in any issues of their own. Nothing short of National guarantees can do it. And the assembled wisdom which formed the Constitution wisely deposited the power of coining with the General Government. There it should remain. The States are prohibited from coining, and it would be singular if individuals were allowed the privilege denied the States. There is no doubt that the bankers who have been instrumental in circulating these coins have contributed principally to their sudden depression. This may be all right and legitimate in their line of business, with which we do not wish to interfere, only so far as our duty to the public urges us. But we cannot see much consistency in paying out ninety-three cents in the form of five-franc pieces for a dollar, and English shillings for twenty-five cents, as they do, while refusing the very coin which they have thrown upon the market at par.

The committee of merchants appointed at the meeting of April 4, 1851, made its report on April 9, which read as follows :

The committee appointed at a meeting of merchants held on Friday, the 4th inst., with instructions to take into consideration and report upon the issue of coin from private mints, established in this place, beg leave to state :

That in performing the duty assigned them the committee have not deemed it necessary to order any assays, or to institute any comparison of the coinage of different private mints now in circulation. It is upon the principle of private coinage that the committee desires to pronounce, and this principle is evidently so adverse to the existence of a sound monetary system that the committee cannot but condemn it in the strongest terms. As far as the committee have been able to ascertain, the present circulation of private coinage amounts to not less than two millions of dollars, and preparations are known to be making to increase the issue to a degree

which will speedily reduce the whole circulation of the country to a coinage confessedly irredeemable and based on no tangible responsibility.

The committee have no wish to censure the proprietors of the mints now in operation, some of whom have given such assurance and offer such guarantees as show the confidence they entertain in the intrinsic value of their coins; but it is evident that the system of private coinage is one that subjects the community to frauds of the most extensive nature, and as well to remedy the evils under which the community now suffer, as to prevent evils of far greater magnitude hereafter, the committee feel it incumbent on them to condemn *in toto* the principle of private coinage, and to recommend the rejection as a medium of exchange in trade of all private coinage without exception. Some loss must be incurred by the rejection of a circulating medium which has up to the present time been currently received. The coin now in circulation will become an article of merchandise, and may fall somewhat below its intrinsic value, but in the opinion of the committee it is better to suffer a present loss, the extent of which may be estimated, than, by permitting a continuance of a false system, expose the community to losses of far greater magnitude from a depreciated currency, and the constant reactions which must inevitably result from want of confidence in the circulating medium.

As the coinage of the United States Assay Office is authorized by the Government and receivable at the Custom House for Government dues, it carries with it a degree of responsibility, and the committee would recommend the continued acceptance in trade of the ingots and coins of that office. Yet they would not be understood to express an unqualified approval of the establishment, which indeed does not seem to meet the necessities of the country. Great delay now occurs in the coinage of dust left at the Office, and it may be doubted if the capacity of the establishment will enable it to supply the country with a circulating medium. Of the guarantees against maladministration in the transactions of the establishment it is for the public to judge, but the committee would call attention to the commissions charged for coinage, and would recommend that efforts be used to reduce this charge to a more moderate and equitable rate.

In recommending the continued acceptance of coin bearing the name of the Assay Office the committee look upon it as a temporary measure only, which the necessities of the country require; but as the only means of placing the currency of the country on such a footing as may entitle it to full and entire confidence, and of protecting the community from evils like those which it is now called upon to guard against, the committee would urge the adoption of strenuous efforts to procure the establishment of a United States Mint at that place.

After the reading of the report, a Resolution was offered and passed, "That no coin of private coinage be received as currency by the mercantile community."

The result of this action by the bankers and the Legislature was the abandonment, for the second time, of private coinage, — the Fifty Dollar octagonal slugs from the U. S. Assay Office being the only pieces struck. The refusal of the business men to receive the private issues except at their bullion value — from five to ten per cent. below their nominal or face value — speedily sent these pieces to the Assay Office melting-pot, only to appear again as Fifty Dollar slugs. This enforced retirement of the smaller denominations left nothing for local circulation but those cumbrous pieces; United States and other coins acceptable for duties were hoarded as before, and once more the citizens found themselves between Scylla and Charybdis. The embarrassment became so great that on April 14, 1851, Moffat & Co. asked the Secretary of the

Treasury to permit them to issue ingots of less than Fifty Dollars' value, but this request, and others made in their monthly reports during the year, were refused as "inexpedient," and the disastrous effect on business, both in San Francisco and throughout the State, was a fruitful theme of complaint in the press and among the merchants. It was not until December 9, 1851, that the United States Assayer was authorized to stamp gold ingots of the value of Ten and Twenty Dollars, and this permission was revoked on the following day.¹

Before this permission and its recall could reach San Francisco, many prominent bankers and business men of the city had united in asking Moffat & Co. to issue \$300,000 in small denominations bearing their private stamp, to meet the pressing need until the United States Assayer should receive proper authority to do so. This request was dated January 5, 1852. Moffat & Co. reluctantly consented, and a few days later the new pieces appeared. On January 15, 1852, they wrote a letter to Secretary Corwin, again calling attention to the serious results to the Assay Office already incurred because of its inability to make small coins (as described in previous reports), in which they said :

. . . that the issues of the Assay Office are at a discount of two or three per cent.; that the Office has incurred the odium of the people on account of the great inconvenience and actual loss to which they are subjected by the depreciation of its issues, which were consequently daily diminishing in amount; that private coinage would again be resorted to, and that coin with a private stamp would be at par, while that stamped by authority of the United States would be at a discount, and the object of the Assay Office defeated unless authority should be speedily granted to issue ingots of smaller denominations than that of Fifty Dollars.

To these representations [which had been frequently made in earlier letters] we have now to add that the state of things above described has been continually growing worse; that a private coining establishment [that of Wass, Molitor & Co.], without reputation or responsibility, began operations early last week; that its issues are at a premium of two to three per cent. over those of this Office; that the business of the Office has nearly ceased, not having been for the last thirty days sufficient to pay its current expenses, — a humiliating and lamentable position for a Government establishment . . .

Humbert, the United States Assayer, had also made a similar statement in his closing report for December, 1851,² and the vigorous presentation of the case by these gentlemen, supplemented by the influence of prominent business men in California and New York, had an evident effect, for on February 11, 1852, Moffat & Co. received authority to issue Ten and Twenty Dollar ingots at the Assay Office. Their consent to strike a private coinage, in response to the petition mentioned above, met with some criticism, notwithstanding the urgent need so generally admitted, and "Alta California" of January 8, 1852, on learning of their action printed a long editorial in which while recognizing the integrity of Moffat & Co., it took a decided stand against the project, but suggested no plan for relief.

¹ The correspondence is given in full in the *Journal*, XLV: pp. 56 *et seq.* ² See *Journal*, XLV: p. 61.

The United States Assay Office (Curtis, Perry & Ward), and Moffat & Co., are the only firms certainly known to have struck gold during 1853. Wass, Molitor & Co., who had conducted an assay office in 1851, had begun a private coinage early in 1852, which was very favorably received, and the assays at the Philadelphia Mint showed them to average quite up to the standard values;¹ it has been stated that this firm continued to issue Five and Ten Dollar pieces in 1853 and 1854, but none bearing these dates have come to our notice. The Assay Office issued Tens and Twenties, and Moffat & Co. Twenty Dollar coins.

EDGAR H. ADAMS.

[To be continued.]

THE NEW MEDAL-STRIKING MACHINE IN THE FRENCH MINT.

FOR several years the Paris Mint has found the number of orders for striking medals of large size constantly increasing, while presses suitable for the work were lacking. Using the most powerful machines which it possessed, it was found necessary, when a large medal was called for, to strike repeated blows, twelve or even fifteen being sometimes required; and as the impressions must be given while the metal is hot, the planchet had to be taken from the press, reheated, and then replaced and adjusted to the dies after every stroke. This was a difficult task, and one requiring great care and skillful workmanship. The Minister of Finance has therefore ordered a very powerful machine, capable of striking medals of any size which are likely to be wanted. It weighs thirty thousand kilogrammes, and the central screw on which the principal strain will fall is thirty centimetres in diameter. To operate it a special dynamo of ten horse-power has been installed. The first piece to be struck was one commemorative of the completion of the seventh year of service of President Fallieres.

THE COINAGE OF THE REPUBLIC OF CHINA.

WE understand that the Chinese Republic proposes to make a number of reforms in the coinage. It certainly is needed, and if anything in the way of a uniform system results, we wish the new Government every success. The new currency will be on a gold standard, .75 grams pure gold in a dollar, the equivalent of the Japanese Yen, or \$0.498 United States currency. The silver dollars are to weigh 26 grams. There will be seven subsidiary coins, namely, 1 cash, 5 cash, 1 cent (10 cash), 5, 10, 20 and 50 cent pieces. The one cash pieces will be composed of an alloy of half brass and half lead; the 5 cash and 1 cent pieces of brass, lead and tin; the 5 cent pieces of brass and nickel, and the 10, 20 and 50 cent pieces of silver and nickel. w.

¹ The statement appears in the "San Francisco Advocate," in 1852, that the coins of Wass, Molitor & Co. and the Tens and Twenties of the United States Assay Office were the only ones then issued, and that the former were received for duties at the Custom House. If this statement be correct, the issues of that firm enjoyed the distinction of being the only private coin-

age, so far as can be learned, thus accepted, aside from the official issues of the United States Assay Office. While the pieces struck by Wass, Molitor & Co., and those of Kellogg & Co., who operated in 1854-55, may have been acceptable because of their intrinsic value, the correctness of the "Advocate's" statement may be doubted.

PROCEEDINGS.

THE AMERICAN NUMISMATIC SOCIETY.

A REGULAR Meeting of The American Numismatic Society was held on Monday, April 22, 1912, Mr. Daniel Parish, Jr., one of the Governors, being in the chair.

The Council reported as follows: The Council takes pleasure in reporting that it has received the following generous proposition:—

Mr. Avery has offered to be one of four contributors, of twenty-five hundred dollars each, to a Fund of ten thousand dollars, the income of which shall be used for the increase of the Society's collections.

This offer was entirely unsolicited, which makes it all the more welcome. A member of the Council has expressed a willingness to become a second contributor, and your Council feel confident that among the members of the Society will be found two more who will be glad to join in completing this much needed fund.

Since the last meeting the Society has lost, by death, one Life Member, Mr. Edward S. Renwick, who joined the Society February 28, 1882.

The Director reported that the number of visitors to the Rooms in March was seven hundred and eighty-seven. Five books, eighteen periodicals, thirty-one catalogues and three pamphlets have been added to the Library. The accessions to the cabinets include one hundred and thirty-nine coins, twenty medals, and three decorations. Forty-nine plaster casts of small bas-reliefs by D'Angers have also been received. The donors are Miss Agnes Baldwin, Messrs. Hugo O. Greenhood, Archer M. Huntington, J. Sanford Saltus, W. Boerum Wetmore and Thomas L. Elder.

An informal discussion and exhibition of the coins of Alexander the Great followed; remarks were made by Messrs. Edward T. Newell, S. Hudson Chapman and others. Illustrating the subject there were exhibited from the Society's cabinets one di-stater and three staters gold, one hundred and twelve tetradrachms and drachms, and six bronze coins. One tetradrachm has an obverse decidedly removed from the conventional Herakles type, and perhaps has some claim to be regarded as a portrait. This type of obverse is frequently found, as in this particular case, with a reverse that can be connected by the chain of similar and identical dies with coins of quite different style; according to Mr. Newell's theory, they belong to the earlier issues of the reign, and were struck at Pella. Style alone, in this abundant series, therefore seems an insufficient basis for classification.

Mr. Newell showed a di-stater, four staters and a one-third stater in gold, forty silver coins, including an unedited drachm, and several rare sub-divisions of the drachm in silver, and six fine bronze coins; the silver was selected to explain his assignments of groups of coins to the Pella mint in Macedonia, and to Phoenician, Cilician and Egyptian mints, with varying symbols of magistrates, as opposed to Müller's assignment to mints all over the Greek world.

Mr. S. H. Chapman showed six gold staters, and twenty silver tetradrachms arranged by a principle based on the development of style, which he suggested would give

the key to the chronologic sequence. Mr. Albert R. Frey showed a di-stater and stater of gold, of fine workmanship, and Miss Baldwin twenty-two tetradrachms from the De-manhur hoard.

The meeting then adjourned.

BAUMAN L. BELDEN, *Secretary*.

ANNUAL MEETING OF THE ROYAL NUMISMATIC SOCIETY, LONDON.

THE following gentlemen have been elected officers for the ensuing year : *President*, Sir Henry H. Howorth ; *Vice-Presidents*, Sir Arthur J. Evans, Litt. D., and Bernard Wroth, Esq. ; *Treasurer*, Percy H. Webb, Esq. ; *Secretaries*, John Allan, M. A., and Frederick A. Walters, Esq. ; *Foreign Secretary*, George F. Hill, M. A. ; *Librarian*, Oliver Codrington, M. D. Among those elected to the Council were Dr. Barclay V. Head, Herbert A. Grueber, Esq., and Miss Helen Farquhar. The silver medal of the Society was awarded to Gen. Max Bahrfeldt, of Eastern Prussia, for his eminently successful labors in Roman numismatics, and Mr. Grueber read a letter of acknowledgment expressing his appreciation of the honor. The University of Giessen has recently conferred upon Gen. Bahrfeldt a Doctorate, *honoris causa*, for his service to ancient numismatics.

OBITUARY.

ARCHIBALD LOUDON SNOWDON.

COL. ARCHIBALD LOUDON SNOWDON, for twenty-eight years connected with the United States Mint at Philadelphia in various positions, and its Director from 1879 to 1885, died September 7, 1912, at his late residence in Ardmore, Pa., after an illness of several months. He commanded for a time during the Civil War a Pennsylvania Volunteer Regiment which he had organized, and later held office in the Diplomatic and Postal Service of the United States. He was elected an Honorary Member of The American Numismatic Society, March 18, 1879.

VARIA.

IT is a fact not generally known to collectors that plans had been made by Fonson Brothers to strike a series of medals, to be the work of eminent Belgian artists, in honor of the Directors of the recent "Exposition Universelle" at Brussels. The original models of many of these were on exhibition at the Exposition, and the preparation of the dies was well advanced. But when the disastrous fire of August, 1910, occurred, not only the models and dies, but the lists of subscribers were destroyed, and it was found impossible to replace them ; a very few medals were saved, one of which was that struck in honor of M. Armand Hubert, which was formally presented him ; a few others were sent without ceremony to those for whom they were intended. The necessary abandonment of the plan will be generally regretted.

IN a recent issue of the *Revue Belge* M. Tourneur suggests that the firms which strike medals should be required to place the name of their establishment on the edge of the pieces they issue, just as an imprint is placed on the title-page of a book by its publishers. He points to the fact that as the modern method of making dies by the reducing machine directly from the artist's model obviates the necessity of retouching them, it is important that the artist should carefully finish the field of his model, as well as the other details, for every defect will be reproduced in the die. On the other hand, if there is a lack of care or skill in operating the reducing machine, this will also be evident, and of course prejudicial to the beauty of the medal. The plan proposed by M. Tourneur, if adopted, would place the blame for imperfect workmanship where it belongs.

BOOK NOTICES.

THE CROSS OF THE MAGI, AN UNVEILING OF THE GREATEST OF ALL THE ANCIENT MYSTERIES.
By Frank C. Higgins, F. R. N. S., etc. 56 pp. 8vo., with numerous engravings. New York, Rogers Bros., 1912.

THIS pamphlet, the first of the "Basic Cryptograph Series" (of which the second number now in preparation, will undertake to demonstrate that the Forty-seventh problem of Euclid conceals Divine mysteries), discusses the significance of the cross, the triangle, the wheel, the swastika and other occult emblems of antiquity, and will interest students of the estoteric symbols used by the Magi and other philosophers in the distant past, whether or not they agree with his conclusions. The illustrations of ancient coins bearing these mystical devices, and the author's theories as to their meaning will attract the numismatist, and it is worth noting that he takes a position regarding some of these emblems, especially the wheel and the swastika, very similar to that of M. Déchelette, printed in recent numbers of the *Journal*. M.

CHINESE EARLY BARTER AND UNINSCRIBED MONEY. By H. A. Ramsden. Jun Kobayagawa Co., Yokohama, Japan, 1912. Small 8vo., pp. 36, 3 photogravure plates and numerous text cuts.

THIS pamphlet is No. 2 of the Manuals of Far Eastern Numismatics, and is perhaps the most interesting of Mr. Ramsden's publications. The subject is divided under the three heads: Domestic Implements, Warlike Weapons, Miscellaneous Utensils. Under the first heading is shown how the spade coins were derived from actual spades. The origin of the knife-money is also cleared up, and it is shown that this large and interesting series has the knife as its prototype rather than the sword. The hitherto little known bell pieces are taken up in detail, as well as gridiron, nutmeg grater, and weight money: Under warlike weapons are given arrow-head, halberd-head, sword and shield money, the latter sometimes known as carapace money. Under the third head the author discusses the ring or disc pieces, lily root, bridge, comb and cicada money. Especial attention is given to the bridge or tingle dangle money. This is the first work to take up scientifically and consistently this phase of Chinese numismatics, and the pamphlet should be invaluable to coin collectors and numismatists. W.



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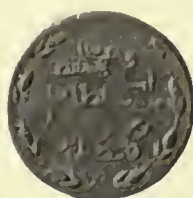
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AMERICAN JOURNAL OF NUMISMATICS.

At mihi plavdo
Ipse domi, simvl ac nvmmos contemplor in arca.

—*Horatii, Sat. I, i. 66.*

VOL. XLVI: No. 4.

NEW YORK.

OCTOBER, 1912.

THE SPANISH-AMERICAN MEDALS.

THE TREASURE SHIPS.

THE earlier historical medals which attract the attention of American numismatists, because of their having some relation, near or remote, to the Western Continent, and to the consequences that followed its discovery, were, with the single exception of the Spanish "Proclamation pieces," the product of European mints. To complete the catalogue of such medals the numismatic annals of various countries must be carefully studied, for it is often only by finding some indirect association not at first apparent, that the connection of a French, Spanish, or Dutch medal with American history is established. A changing dynasty or a sudden revolution in some European kingdom may have a far-reaching influence on the people of its trans-atlantic colonies, and yet, because of their lack of proper facilities, pass without medallic record here, while the mints of the mother country are busily engaged in striking commemorative pieces. "Medallic Illustrations" describes five hundred and fifty or more—English, Dutch, French, etc.,—issued in the period of the English Revolution of 1688, the advent and the reign of William and Mary, and events consequent on the abdication of James II. Nothing in our earlier Provincial history caused greater rejoicing here than the overthrow of that Prince, and its consequences to New England were of the highest importance; yet in all that copious list, Betts could find but two, or at most three,¹ which he felt justified in including in his catalogue, and none in which there is mention of the British American Colonies; on the other hand, he enumerates a dozen French and Spanish medals of that period.

¹ These are the *Kebeca Liberata* of Louis XIV and its modern restrikes, the Darien-Campbell medal of 1700, and the *Vigilans eludit hiantem* (his 92), of very doubtful allusion to America (of which the reverse is given in Med. Ill. as applying to William III). The so-called "Elephant tokens," dated 1694 (his 78-82),

are not mentioned in Med. Ill. "Queen Anne's Bounty Medal" (Med. Ill.: 43, 44) is much more deserving a place than the questionable *Vigilans*, for while it bears no allusion to America, the missionaries of the Established Church in the Colonies have been occasional beneficiaries of the Fund she founded.

For our present purpose the medals of foreign origin relating to America may be divided into two general classes, though as the two frequently coalesce, it is evidently difficult if not impossible to draw an exact line of separation which will apply to all. The first class would include those which are commemorative — those for example which tell us of the voyages of the explorers who followed Columbus, Vesputius and Cabot (and it is noteworthy that no contemporary medals recording the exploits of those great navigators were struck) — men like Drake and the Dutch sailors of the sixteenth, and Anson, Keppel and Cook of the eighteenth centuries; those which tell of events that occurred on American territory and which belong to the period when Spain and Holland, England and France, were rivals in extending their dominions on the Western Continent, or in protecting and strengthening their colonies; and especially those pieces which allude to incidents or changes resulting from international struggles over disputed claims.

In the second class might be placed those of broader scope, having reference not so much to single events, as to commercial enterprises, to the characteristic products of the new world, its illimitable treasures, and the results consequent upon their discovery, when the lust for gold demoralized the conscience of the "Christian" nations, and the lament of Propertius over the extravagance and luxurious indolence of the ruling class of his day might well have served as a prophetic warning to the followers of Cortez and Pizarro, —

Auro pulsa fides, auro venalia, jura:
Aurum lex sequitur, mox sine lege pudor.¹

To be somewhat more specific: — in the former class, in addition to the medals of the great explorers already mentioned, we may place those of the Dutch victories in the West Indies and South America and the four or five of Spanish origin which mark the seizure of the Portuguese possessions in 1581; those of Lord Baltimore on the settlement of Maryland; the colonization medals of Charles II; the Louisburg pieces of Louis XIV, with their various obverses restruck in the last century; the French conquests in the West Indies; the Vernon medals with their bewildering mules and restrikes from retouched dies, so numerous that it is impossible to discover how many original dies were engraved; those on British and Franco-American exploits in Canada, and finally the interesting pieces struck in France and England for presentation to Indian chiefs.

The second group would include medals like the RELIQVVM DATVRA (Betts 12), with its curious device of a woman followed by a camel, and offering the

¹ *Elegiae*, III: 13, 48. Liberally rendered, "By gold Law follows gold as a willing captive, and losing shame, good faith is crushed; by gold justice becomes venal; soon ceases to exercise restraint."

world to Spanish commerce; or that with the proud legend *HISPANIA VTRIVSQ. ORBIS REGNATRIX*; here too we should place the American aloe or Century-plant medals; the John Law pieces—because of his connection with the “Mississippi Company” and Louisiana scheme; the Franco-American jetons of Louis XV; those describing the capture or destruction of Spanish treasure galleons, in American or European waters, and finally some of the Proclamation pieces cast in Mexico and Peru from American silver, announcing the accession to the throne of a new “King of Spain and the Western world.” The latter group, though usually classed as medals because issued by sufferance and not coined by royal authority, were in reality a “money of necessity,” and like the private gold coins of California half a century ago, were evoked by the imperative need of an acceptable circulating medium, which the enormous products from their mines forced upon the people. Rude in execution, their legends and devices, however loyally phrased, veiled but could not conceal the real purpose for which they were cast,—whether actually or only nominally with the approval of the civil or ecclesiastical authorities,—and they lack the attractiveness of most of the other so-called “American medals.”

Of the medals belonging to the second class, those which record the capture of Spanish ships and treasure, and particularly the Vigo medals of Queen Anne's time, which close the series, have a peculiar interest. More than any others, perhaps, they recall the discovery of the new world; but they also mark the decline and fall of a once powerful kingdom. In the days of Cortez, says Fiske, Spain was the foremost power in the world; in the time of William and Mary of England, the France of Louis XIV was the foremost power, and Spain, far sunken from her old pre-eminence, furnished the bone of contention between France and England in the first of the two great struggles which won for England the foremost place.¹ The destruction of the Spanish galleons in Vigo Bay, soon after Anne's accession to the British throne, of which the cargoes were to be devoted to the necessities of the French king, at that time very pressing, snatched fourteen millions of “pieces of eight” from his grasp, and his hope for the relief which they would have furnished vanished.

The crown jewels of Isabella of Castile enabled Columbus to undertake his search for the riches of the Indies, and to lead his three little caravels “into the remotest stretches of the mysterious Sea of Darkness;” in return, her successors were given the exhaustless mines of Mexico and Peru, the envy and the ceaseless temptation of rival princes, and which in time proved to be a veritable robe of Nessus to the recipients.

¹ See Fiske's *Discovery of America*, II: 554.

Holland, which had suffered so much from Spain at the hands of the cruel and insolent Duke of Alva, was the first to strike a blow against the Spanish-American possessions. In 1599 Admiral Van der Does, with a large fleet, seized the Canary Islands and then sailed for Brazil, which on the death of Sebastian of Portugal had passed to Philip II of Spain, who claimed the crown of the dead king. After capturing many richly laden merchantmen the Admiral next took St. Thomas, and filled his vessels with Spanish booty; but a pestilential fever which carried him off with nearly a thousand of his followers, put an end to further attacks. The Dutch, rejoicing over their conquests, struck a medal and jeton to commemorate the events. On the first, the glory is given to Maurice, who as Admiral-General of the United Provinces, had planned the expedition, in which however he took no further part. The medal (Betts, 19; Van Loon, I: 519), has the following device:—

Obverse, Bust of Maurice, Prince of Orange, in armor to right. Legend, MAVRITIVS · P · AVR · CO · NASS · CAT · MARC · VER · ET · VLIS · and below the bust C · FRIS · C · M · (Maurice, Prince of Orange, Count of Nassau and Katzenellenbogen, Marquess of Vere and Flushing, Count of Frisia and Moers.)

Reverse, The goddess Fortune stands on a globe floating on the sea; she holds a swelling sail to catch the favoring breeze, and Neptune in his car is following her; in the distance is a city (? Pavoasan) burning. No legend. Silver, size 20.

There are numerous medals of this Prince, but no others have any relation to this continent, and but for the fact that Dutch authorities tell us that this and the jeton below were struck to commemorate victories over Spanish power in America, both, for all that appears, would have passed without recognition of that fact. The jeton (Betts, 20; Van Loon, I: 519), compares the Dutch Admiral to Jason:—

Obverse, The ship Argo which bore Jason and the Thessalian heroes from Colchis, on the quest for the dragon-guarded golden fleece. On the sail the Hebrew tetragrammaton, יהוה, as if invoking divine protection; beneath the ship the letters s. c. (perhaps the initials of the die-cutter, whose name we have not learned). Legend, EN · ALTERA · QVAE · VEHA · ARGO (What heroes this new Argo carries!)

Reverse, A marine landscape, with islands and their cities, of that part of Guelderland which revolted from Spain in 1579; among them stand two of the Roman monumental boundary deities, between which is the four-lettered name as on the obverse. Legend, SIC · NESCIA · CEDERE · FATA · CIO · IO · IC · ♦ (The Fates who know not how to change, have thus decreed, 1599.) Silver, size 17.

Like many medals of the period, this is replete with apt symbolic allusions to ancient prototypes of contemporary history. The obverse legend is adapted from verses 34 and 35 of Vergil's fourth Eclogue, with its sibylline prophecy of a future golden age:—

Alter erit tum Tiphys, et altera quae vehat Argo
Delectos heroas

(Then there will be another Tiphys [Jason's pilot] and another Argo, which shall carry chosen heroes.) The allusions to Prince Maurice, his Admiral, and the future hopes of the Netherlands, delicately veiled by the device and legend on the obverse, are certainly very happily selected. The ship Argo is doubtless designed to suggest the famous Order of the Golden Fleece, originally founded by Philip III, Duke of Burgundy, January 10, 1429, on his marriage with the Princess Isabella of Portugal, and of which in later years the Kings of Spain claimed the hereditary Grand Mastership; it typifies Spain on numerous medals, one of which, struck for Philip V in 1702 (Betts, 92), has a dragon-guarded tree, from which hangs the golden fleece, with the legend *VIGILANS ELUDIT HIANTEM*. Van Loon says the islands shown on the reverse are Bommel and Thiel, and that the meaning of the Termini with the sacred name between them is that divine power has fixed a limit to Spanish dominion.

There are several medals on naval victories won by the Dutch over their Spanish adversaries. One records a battle on March 16, 1602, when two Dutch ships drove a Spanish galleon ashore at St. Helena. The obverse has the haughty motto of Philip II, *NON SVFFICIT ORBIS* (One world is not enough), with the steed of St. James, the patron saint of Spain, springing from a globe (a favorite device of Philip), but pursued by the lion of Zeeland, leaping from the sea. The reverse has a view of the sea-fight, — the Spanish ship between two smaller Dutch vessels. The obverse motto is the only reference to the Western world. This piece is of silver, size 32.¹

In 1624 two Dutch Admirals — L'Hermite and Willens, — were engaged in attacks on Spanish-American colonies, the former in the Pacific, and the latter in the Atlantic, off the coast of Brazil. While both were sent out in the hope of capturing some of the royal treasure-fleets sailing from South American ports,² there is nothing to indicate their purpose in the devices on the medal (a portrait of Prince Maurice and various armorial bearings), which was struck in silver, size 42.

In 1629 there appeared five medals struck to commemorate the capture of a large and richly laden fleet of Spanish treasure-ships in the Bay of Matanzas, by an expedition fitted out by a Dutch society of merchants, and commanded by Peter Heyn. The first of these has upon the obverse a curious and interesting map of the Western Hemisphere as then known, with the tropical and equinoctial lines. The legend is a Latin text from the Vulgate,

¹ Illustrated by Betts (21), and Van Loon (I: 548); the latter gives a somewhat elaborate explanation of the devices, and says that Drake found its motto embroidered in golden letters on the drapery of the viceregal throne in San Domingo. The Spanish galleon was the "St. Jago" (James), and she may have been homeward bound from the rich Portuguese colonies in the East (then Spanish possessions) for all that appears.

² Admiral L'Hermite was a descendant of a French Protestant family; he offered his services to the United Provinces and was sent with a fleet of eleven vessels to attack the Spanish colonies in Peru. His ships suffered severely from storms while crossing the Atlantic, but he succeeded in rounding the Horn and threatened

Callao, famous in after years for its huge old Spanish fortress, where he was repulsed, and his assault on Arica was not especially successful; he died the same year of a disease contracted on his outward voyage. Sometime afterward an account of his expedition was published at Amsterdam. Sympathy for his sufferings and a recognition of his courage under misfortune, rather than any brilliant exploits accomplished, elicited the medal, the two laurel branches enclosing the arms on the reverse, and said to allude to the two Admirals, being the only recognition of their service, and that a very obscure one. Prince Maurice seems to claim the glory, if there was any. See Van Loon, II: 155, Betts, 22, and Med. Ill., James I, 91.

GENTES EXIGENT (*Jere. xxvii: 7*), a portion only of the verse being given, for lack of space probably, — that which appears signifying “Nations shall serve him until the time come when they shall require from him the same servitude.” The reverse shows the engagement, in which the entire fleet was taken; below is a seven-line inscription in Latin, giving the date — Sept. 8, 1628 — the name of the Dutch Admiral, and the place; while the legend, another abbreviated text from the same Hebrew prophet (*li: 33 and 48*), with a slight transposition of the words, compares Catholic Spain to the daughter of Babylon: *FILIA · BABIL · QUASI · AREA · CALCABITUR · AB · AQUILONE · TEMPORE · MESSIS · EIUS* signifying “The daughter of Babylon shall be trodden (by spoilers) from the north when the time of her harvest shall come.” Silver, size 41. The legends show the deep and lasting resentment of the Protestant Dutch, whose revolt against the cruelties of the Duke of Alva, the detested Spanish General, and his “Bloody Council,” in the previous century, cost Spain a seventy years’ war, “her finest troops, untold treasure, and the loss of seven of her richest provinces in the Netherlands.”

Another of this Matanzas group shows the Spanish fleet surprised by the Dutch and attempting to escape; seventeen large vessels and ten smaller ones appear on the obverse, and from the long reverse Latin inscription, in thirteen lines, we learn it was a bloodless victory. It is dated 1629, the year of striking. The obverse legend is an elegiac distich —

Non ferro tantvm Hispanvs quantvm valet avro:
Avrvm avfer, ferro non svperabit Iber,

translated, “The Spaniard is not so powerful with his sword (literally, iron) as with his gold; deprive him of his gold and the Iberian will no longer win by his iron.” There is a variety of this piece, perhaps struck a little earlier and differing in execution, though of the same general design; on the obverse there are only five small vessels and the shore of the bay is not so rocky; the reverse is also from a different die but similar in arrangement and with the same legend as the preceding. Both are of silver and size 37.²

The other two pieces on the same event were struck in honor of Heyn, the Dutch Admiral; the description of the first is as follows: —

Obverse, A portrait bust, nearly facing, of Heyn; he wears plate armor richly decorated, and the high ruff of the period, with a heavy quadruple chain, the gift of the Provinces, hang-

¹ The coiners and medallists of the time seem to have paid little attention to the Scriptural meaning of a text if its words could be adapted to their purpose; the flattering motto *Gloriam regni tui dicent* (*Ps. cxlv: 11*) on a well known coin of Louis XIV is one of many similar instances that might be cited. The reference in the original text used on the obverse, is to Nebuchadnezzar of Babylon; here it alludes to the Spanish

king, Philip IV. The words omitted from both legends, especially on the reverse (*It is time to thresh her*), would have given a still sharper thrust from the Dutch point of view.

² See Betts, 24 and 25; Van Loon, II: 171, shows the first but not the second, an impression of which was in the Fonrobert Collection.

ing on his breast. Legend, PET : PETRI : HEINIVS : FOED : BELG : ORD : ARCHITHALASS. (Peter, son of Peter Heyn, Chief Admiral of the United Netherlands.)

Reverse, A fleet of twenty or more ships, in an engagement, and five boats; one vessel is in a sinking condition. Legend, HEINIAD NVP SENSIT SPOLIATA MATANCA (Matanzas, despoiled of its treasure, has lately felt the power of Heyn.) Silver, size 37.

The second of the group has on the obverse a similar bust of Heyn but with a different ruff; the chain on his breast as on the preceding. The legend, in Dutch, is a rhyming couplet, five words in each line (but not divided on the medal) — NOCH SILVER GOVT NOCH STAET DE DEVGT TE BOVEN GAET (Neither silver, gold nor rank can surpass courage.) The reverse shows the fleet entering the harbor, and an ornamental tablet below, on which is SILVERVLOOT and the date of the battle, 1628. Silver, size 29.¹

There are two others of the Heyn group included in his Historical Medals of America, by Betts (28 and 29), but we have been unable to find the reasons for his attribution; they are memorials of the Admiral's attack on Dunkirk, France, in June, 1629, in which he lost his life.

In 1630 the Dutch took Pernambuco, the principal sea-port in Northern Brazil, and two medals were issued, both of the same general design, but slight variations in their execution show that they were from different dies. The obverses have an ornamental tablet on which is a portrait of Frederic Henry, Prince of Orange, — his bust in armor, three-quarters to right; the tablet is supported by two figures — that on the right, Mars holding an armorial shield, and that on the left, Victory with a palm-branch; they hold a laurel crown above the tablet; beneath is a view of a city, and its name and date of capture. Legend, in two lines, AUREA CONDET | SÆCULA — the meaning perhaps being that the golden age foretold on the "Argonaut" medal of 1599, had arrived. The reverses have a shield with arms and supporters over which angels hold a wreath; below are four tablets, one of which shows a naval combat, the date 1628, and SYLVER VLOOT. This probably alludes to the affair in Matanzas Bay, described above, for we find no other mention of the capture of Spanish treasure-ships in that year. On another tablet, 1630 PER-NAMBVCO and a view of that city. The legend is a prayer for a victorious peace. Silver, size 42.

There are several other medals which describe Dutch naval victories in American waters, and especially on the Brazilian coast; numerous medals of Louis XIV also record American victories won by his fleets, and the spoiling of cities in the West Indies and elsewhere, from which enormous hoards of treasure were taken away; but among these we find none that mention the capture of treasure-laden galleons, and pass them without further mention.

¹ Van Loon, II: 171, has a description and comments on this and the preceding.

The Peace of Ryswick between the allies and Louis XIV was finally signed in October, 1697, but proved to be little more than a truce, so speedily followed the War of the Spanish Succession, when the French monarch claimed the crown of Charles II, the dead King of Spain, for the Duke of Anjou, a grandson of Louis. In May, 1702, less than a month after the coronation of Queen Anne, war was declared by England and her allies against France and Spain, and in October following, Sir George Rooke led a squadron of nine English and Dutch vessels to Cadiz, which refused to surrender, and the Dutch being unwilling to bombard the city, in consequence of the opposition of the Prince of Hesse, he sailed northward to Vigo Bay, where the treasure-ships of Spain on their annual homeward voyage, and convoyed by a French fleet of twenty-three sail, had sought refuge.

Vigo, founded by a Roman colony, is in the province of Galicia, and the bay on which it stands forms one of the finest harbors on the Spanish coast; its mouth is sheltered by several islands, and at the time of the battle a boom and a strong double chain had been stretched across the entrance. On the southeastern shore rises a hill, the summit crowned with a citadel — El Castro (its name derived from an old Roman camp which once occupied its site), but now in a dilapidated condition for a fortress once styled the "impregnable." The ancient city walls, with their six gates, protected by Forts San Julian and San Sebastian, are much in the same ruinous state. At the time of the battle it was believed that the sea and the hills which surround the town would enable it to withstand all the assaults of its enemies. Sir Francis Drake attacked it in 1585 and again in 1589, and Viscount Cobham in 1719.

Louis had been anxiously waiting for the arrival of the galleons, and had taken every precaution in his power for their protection, for his necessities were very pressing; the ships had sailed some miles up the bay, and lay off Redondella, which was strongly fortified with a castle on one side, and several batteries on the heights. But the treasure, some fourteen millions of dollars, "was snatched from his hands, and his hopes and fleet destroyed; France did not recover from the blow during the war."

Betts describes ten Vigo Medals (all of which are also given in Medallie Illustrations), but one of them is a portrait medal of Sir George Rooke and his second wife, Maria, a daughter of Col. Francis Luttrell, and has no reference to America, and another is of a mule, of which but one die alludes to the battle.¹

1. *Obverse*, Neptune in his car is riding over the sea to the right, his trident in his left hand; his right receives from Victory, flying above, a scroll on which are inscribed in twenty-

¹ Betts, 102; Med. Ill., Anne, 37. There are seven 64-70), but which do not interest collectors of American medals.
others which commemorate actions in which Rooke was engaged, at Gibraltar and Malaga (Med. Ill., Anne,

four lines, the names and fate (whether captured, burned or sunken) of the French ships, and a statement that nine of the Spanish galleons were taken and two sunk. Near the car are three sea-nymphs bearing shields with the arms of the allies. Legend, *HIS MILITAT AETHER* (Heaven fights for these.) In the exergue, in four lines, translated, "On the destruction of the enemies' fleet and the capture of their treasures from the Indies, in Vigo Bay, Oct. 22, 1702." G. F. N. (initials of Nurnberger, Mint-master at Nuremberg), and on the car, G. H. (initials of Hautsch, another Nuremberg die-cutter).

Reverse, View of the entrance to Vigo Bay, guarded by forts on each side and the boom; the treasure-fleet is in the harbor, and nine vessels of Rooke outside are about to attack. Legend, a continuation of the obverse legend, translated, "And the confederated winds respond to the trumpet's call." Silver, size 20.¹

2. *Obverse*, Crowned bust of Queen Anne to left; with a "love-lock" falling on her left shoulder. The legend gives her title, abbreviated as on her coins.

Reverse, View of the harbor with the treasure-fleet burning, and the vessels of the allies lying near a fort at the entrance. Legend, translated, "The French and Spanish fleets taken and burned." In exergue, translated, "At Vigo, Oct. 12, 1702." Silver and copper, size 24.²

3. *Obverse*, Bust of the Queen, similar to the preceding, but from a different die, and the abbreviations vary slightly.

Reverse, Similar to the preceding, but the punctuation varies, there being periods throughout, instead of colons after *GAL* and *HISP*, as on the last. Silver, size 26. Very rare.³

4. *Obverse*, Bust of the Queen to left, her hair bound with a fillet and the love-lock falling on her right shoulder. Legend, Her title as Queen of Great Britain, France and Ireland, abbreviated. Below the bust, *I. BOSKAM . F.*⁴

Reverse, The allies attacking the forts and ships. Legend, translated, "The French and Spanish fleets defeated, burned and captured." In exergue, translated, "The British and Dutch expedition to Vigo, 1702." The Dutch Admiral was Van der Goes. Silver, size 28.

5. *Obverse*, Bust of the Queen to left, and legend as on the last.

Reverse, Hercules steps from the sea to plant his foot on the neck of a prostrate dragon, and stops the flight of a French soldier who is endeavoring to carry away the golden fleece. Legend, *NON DOLO NEC ARTE SED APERTO MARTE* (Neither by craft nor stratagem, but by open war.) Silver, size 28; rare.⁵

6. *Obverse*, Victory decorating a trophy of arms composed of cannon, flags, and implements of war, placing upon it a naval crown pierced by a trident; in her left hand she holds a

¹ This medal is said to be very rare. The legends refer to the favorable breeze, on the day before the battle (which is the date on the piece), by which the frigate *Torbay*, under Admiral Hobson, was enabled to break the chain and boom across the harbor. The legends are adapted from Claudian's *Panegyric of the Emperor Honorius*; it is interesting to note that the same thought is used on two later medals of the same reign (*Med. Ill.*, Anne, 87, 88), struck to commemorate the relief of Barcelona in 1706, in which Admiral Byng, one of Rooke's associates at Vigo, took part. They were prepared by order of the Archduke Charles of Austria, the rival of Philip V for the Spanish crown, recognized as Charles III of Spain by the allies. They bear his portrait and title, and on the reverse a view of the city, over which is the sun, the well-known device of Louis, in eclipse; as the flight of the French and the eclipse occurred on the same day, the victors chose to interpret the portent as auguring that Heaven was fighting against the King of France.

² There are three varieties of this piece from slightly differing dies, which were engraved by John Croker, a native of Dresden, but one of the assistant engravers at the British Mint when this was struck. The date is in Old Style, England not having then adopted the new.

³ The dies are in higher relief and the work not so well executed as that of the preceding. Christian Wer-muth, a native of Altenburg, and Mint-engraver at Gotha, is supposed to have made this for the use of the "Imperial" or German allies of England and the Netherlands, though their ships took no part in the assault.

⁴ Jan Boskam, a Dutch engraver, made many medals for William III; the obverse is a copy of the obverse of the official medal engraved by Croker for Anne's coronation, and the piece was struck in Holland.

⁵ On the reverse of this medal we have another symbolic allusion to the myth of the Argonauts, and a curious and incongruous mingling of classic and modern

palm-branch. Legend, translated, "The hope and power of the enemy broken." In exergue, translated, "The French fleet burned, the Spanish-American treasure is intercepted."

Reverse, A map of Vigo harbor with the city, Vigo, and its defences at Redondelle, Boces, and Cangas indicated. Legend and exergue, translated, "By the valor of the English and Dutch, at Vigo, a port of Galicia." Edge inscription, a line from Ovid's *Ars Amoris*, II: 2, *Decidit in casses praeda*, etc., translated, "The prey [that France] sought for has fallen into my nets." Silver and tin, size 25. Rare. (Struck in Germany.)

7. *Obverse*, Bust of the Queen to left, with legend as on No. 4, above. Below is I. G. L., the initials of Johann Gottlieb Lauffer.

Reverse. Similar to that of No. 6. Copper and brass, size 16.¹

8. *Obverse*, On a rostral column stands a Victory treading under foot the flags of her adversaries; she holds a wreath and a trumpet, and two captives, typifying France and Spain, are chained to the base of the column which is inscribed, translated, "In the triumphant year of Liberty, 1702." In the distance the allied fleets are burning the French ships and Spanish galleons; the land adjacent is marked REDONDELLA, VIGOS, CANNAS. There is a double legend, the two separated by a cable border; the inner one of the two, translated, "These for a trophy, the others for the flames." The outer one, translated, "In memory of the burning of the Spanish-American galleons and the French fleet at Vigo," and a verse from the Aeneid, *HI NOSTRI REDITUS EXPECTATIQUE TRIUMPHI* (Thus we return and these are our expected triumphs).

Reverse, A trophy of castles, prows and standards, over which rise a clump of arrows (the emblem of the United Provinces), the rose of England and the Imperial eagle, united by the shield of Minerva with the Gorgon's head, from which forked lightnings are darting. The base is supported by the Dutch lion, the German eagle and the English unicorn. Near it are the initials M. S.² Legend, translated, "Thus the arrows, the rose and the bird of mighty Jove display the Gorgon's head to you, Frenchman, and to you of Spain." Silver, size 37. This is very rare—perhaps the rarest of the series.

9. *Obverse*, From the reverse die of No. 5 above.

Reverse, From the obverse of a medal by Boskam, struck to commemorate the relief of Nimeguen, in the June previous to the affair at Vigo Bay, and which has nothing to do with America. Silver, size 28. The original of the latter, and the mule, are both rare.

emblems, the explanation of which in Medallist Illustrations (Anne, 21), is followed by Betts (99), but seems hardly consistent with history. Hercules, one of the Argonauts, whose object was to capture the golden fleece guarded by Aetes and a dragon, typifies Rooke, who, as the legend says, was endeavoring to take it, "not by craft, but by open war." But the classic demigod is seizing a French soldier in modern uniform, who, says the editor in Med. Ill., represents "the French Aetes, Louis XIV, who attempted to usurp the dominions and wealth of Spain in South America and the West Indies," the kingdom being symbolized by the prostrate dragon. The French king was no guardian Aetes, and sought the golden prize for his own ends, as did the Argonauts of the story, and England in turn snatched it from his grasp, not to restore it to Charles III, the claimant, or to Spain, its lawful guardian, but to thwart the ambitious designs of her French rival.

¹ This is a Nuremberg "Counter," the obverse copied from Boskam's medal (No. 4) but reduced, and the reverse is from a German medal (No. 6). The Lauffers were a Nuremberg family, who by special permission manufactured numerous counters for games and reck-

oning, from the close of the seventeenth to some time in the early part of the eighteenth century. Betts (95) reads the initials I. G. L., and assigns it to Lazarus G. Lauffer, who went to Vienna after 1690, where he followed Hautsch, who had gone thither from Nuremberg, and who is supposed to have worked on the obverse of No. 1, above. Med. Ill. reads the initials from an example in the British Museum as in the text; the early death of Mr. Betts prevented him from giving his MS. a final revision before it was printed, and thus verifying some doubtful points; this fact no doubt explains the variation between the two, but as he was familiar with Med. Ill., the editors of his work did not feel justified in changing his attribution to a different engraver.

² The obverse legend is from Vergil's Aeneid, XI: 54, and is another instance where the context in the original gives it exactly the opposite meaning from that which it bears on the medal (Aeneas grievously laments the return to Evander of the body of his son Pallas, slain in battle). The reverse legend, *TELA, ROSA*, etc., is a Latin distich, though not divided on the piece. M. S. are the initials of Martin Smeltzing, of Amsterdam.

The British commander in this exploit was Admiral Sir George Rooke, who was born near Canterbury, England, in 1653; he was a "Post captain" when only twenty-three, and in 1689 commanded a squadron; for his good service William III made him Rear Admiral of the Red. In the sea-fight off Beachy Head, supported by Admiral George Byng, one of the most distinguished officers of the British navy (knighted by Anne, and later raised to the peerage as Viscount Torrington), he defeated the French under Admiral De Tourville, and for his subsequent successes was promoted and knighted. After the Peace of Ryswick he became a member of Parliament for Portsmouth, but resigned office after the criticism of his failure to capture Malaga, and the closing years of his life were passed in retirement. He died January 24, 1709. Of the Vigo treasure much went down in the sunken ships, and only about one-half was divided by the victors; a part was coined at the British Mint, and bore beneath the Queen's bust the word *VIGO*, to commemorate the engagement, and a part was given to the officers and sailors as their share of the spoil. In the last century several French companies were formed to raise the sunken galleons and divers were employed in the search; nothing but two old cannon, shell-covered and corroded, were brought to the surface; these are (or recently were) in the Artillery Museum at Paris, while about seven millions of dollars in our money await some future Phipps.

We close our list of captured-treasure medals with one struck for an affair off Lima, July 10, 1745, when two British privateers, the "Prince Frederick," under Capt. James Talbot, and the "Duke," under Capt. John Morecock, took two of a little squadron of three Spanish vessels, the "Lewis Erasmus" and the "Marquis d'Antin"; the third, the "Notre Dame," escaping as night came on, after a stubborn fight.

Obverse, View of the action, in the foreground; a chase in the distance, at the left; the names of the ships engaged are indicated by initials over their topmasts. The date in two lines is in the exergue. No legend.

Reverse, Two elliptical medallions; that on the left is supported by a winged infant blowing a trumpet, and has upon it the portrait of Talbot to right, in cocked hat and wig, with his name; the other, at the right, has the portrait of Morecock to left, in similar costume, with his name, and is held by a similar figure who holds a palm above the two. Beneath, a treasure wagon marked 44 is disappearing at the left, followed by another, drawn by six horses, marked 45. No legend, but in the exergue, in two lines (the Latin not grammatical), translated, "They came to London Oct. 1 and 2, 1745." I. KIRK F on the lower rim of each side. Silver and copper, size 24. Rare.¹

N.

¹ Med. Ill. (George II, 246) says the obverse was copied from a silver vase presented by the owners of the privateers to Sir George Lee, their advocate in the prize court, and which is still preserved at the family seat, and that the two vessels taken contained treasure to the value of nearly four million dollars. John Kirk,

the engraver, was a pupil of Dassier, one of the assistants in the Royal Mint at London; he received many premiums for his work from the Society of Arts. He died Nov. 27, 1776, at his residence in St. Paul's Churchyard, London. Quite a goodly number of his medals relate to America.

THE COINAGE OF TIBET.

IN a country that, to Occidental minds, seems as strange as Tibet, it is natural to suppose that the coinage would manifest the same characteristics. Up to within recent times very little has been known about this isolated land, and it is safe to say that very few collectors are familiar with its coins. The occasional traveller has brought home brief notes on the money, and one or two Chinese scholars have added a few scant words to this knowledge. On the other hand the coins are not as rare as one might suppose, and in order that the interested collector may recognize these I propose to give a sketch of the coinage and illustrate its principal varieties, most of which are in my collection. For the numismatic and historical information I am indebted to the able articles by Terrien La Couperie,¹ W. W. Rockhill,² E. H. C. Walsh,³ and S. W. Bushell.⁴ These four writers are, so far as I know, the only ones who have treated the subject from a numismatic standpoint, Mr. Walsh's article being by far the most complete.

The coinage proper of Tibet falls under three general heads, and as each division has sharp lines of demarcation, the classification is very simple, especially as under two of the divisions only one denomination was issued. This was the *Tang-ka*, fractions of which were made by the simple method of cutting the piece into different sizes. The three divisions of the coinage are: — the Tibeto-Nepalese, the Tibetan proper, and the Sino-Tibetan.

The tang-ka has a nominal value of six annas, though, as a rule, three of them are exchangeable for an Indian rupee, the equivalent of sixteen annas. Their weight and fineness have varied at times from 60 to 105 grains. Their size is a trifle over an inch.

According to certain Chinese authors, the Tibetans in ancient times used cowries and knife-shaped coins, but since the twelfth century silver has been the circulating medium.



We know that the Malla dynasty of Newar kings of Nepal coined money for Tibet, for Mahendra Malla of Khatmandu, in the middle of the sixteenth century, made a treaty with Tibet by the terms of which he supplied the coinage of that country and obtained from thence the silver for that purpose; later the kingdom of Bhataon shared this privilege. None of this first money is now known, but a coin sometimes found in Tibet was issued by Jaya Bhupatindra Malla (No. 1, Plate 25), called by the natives *Ang-tuk*, i. e. "number six," from the last figure of its date 816 N. S. (Newar date) or 1696. We find

¹ The Silver Coinage of Tibet. *Numismatic Chronicle*, 1881.

² Notes on the Ethnology of Tibet. Govt. Ptg. Office, Washington, 1895, and Land of the Lamas.

³ The Coinage of Tibet. *Memoirs Asiatic Soc. of Bengal*, 1907, and The Coinage of Nepal. *Jour. Royal Asiatic Soc.*, 1908.

⁴ Notes in the *China Review*, 1878 and 1880.

other Nepalese coins of this type which differ from the ordinary Newar coins for Nepal. Mr. Walsh considers all of this style the probable coinage for Tibet, and points out a small double hand-drum or *damura*  and a loop  on the reverse, at the top. This drum is peculiar to Tibetan Lamas, and would naturally be a suggestive symbol of the Nepal artificers for the Tibetan coinage. The natives call this type of coin *Pa-nying tang-ka*, or "old Nepalese coins." It is also known as the *Dung-tang*, i. e. "Spear tang-ka," or *Dung-tse*, i. e. "Spear point," from the trident on the reverse. Other Bhatgaon coins with these characteristics were issued by Jagatprakasa Malla, dated 752 N. S. (A. D. 1632); Jitamitra Malla, dated 783 N. S. (1663), and Ranajita Malla, dated 842 N. S. (1722). The latter coin we shall speak of later. Of those issued by the kingdom of Kathmandu, we find one undated of Laksminara Simha, and a mohar of Pratapa Malla, dated 761 N. S. (1641). Of those issued by the kingdom of Patan or Lalitapur we find mohars of Sid-dhi Narasimha, dated 751 N. S. (1631), and Jaya Srinivasa Malla, dated 781 N. S. (1661).

The last ruler to make these tang-kas or mohars for Tibet was Jaya Ranajita Malla. It is known as a *Nag tang*, or "black tang-ka" (No. 2), and bears the date 842 N. S. (1722). These especial pieces of Ranajita were so debased that when the Gurkhas conquered Nepal they refused to continue coining money for Tibet if they had to exchange these at par. This led to a war between the two countries in 1768. Since then, though no regular tang-kas have been struck by the Gurkhas in Nepal for Tibet, this Gurkha currency has passed freely there, where it is known as *Cho-tang*, or "tang-kas for cutting." These cut pieces serve as the sub-divisions of the tang-kas. In Lhasa and Central Tibet they are cut and clipped in one manner (see Nos. 3 and 4); often the edges are clipped and the centres cut out. According to Mr. Rockhill, the mode of cutting in Eastern Tibet is different (see Nos. 5 and 6); there the *Ga-den* tang-ka is clipped, a piece which is never cut in Central Tibet, where the Gurkha issues and the *Kong-par* pieces are the only ones so treated. No. 5 is called a *Sho-kang* or "two-thirds" tang-ka; No. 3 is *Chhi-ke*, or "half;" No. 4 is a *Kar-ma-nga*, or "third," and No. 6 a *Kha-kang*, or "sixth."

A few years after the time that the Gurkhas of Nepal refused to coin any money for their more northern neighbors, the Tibetans began to strike their own; this was about 1750. This coinage was known as the *Ga-den Pho-dang tang-ka* (Nos. 7 and 8), and was minted at the Ga-den palace at Lhasa; it is a copy of a Newar coin of Jaya Jagajjaya Malla. The centre has a wheel design, surrounded by eight panels in each of which is a Tibetan inscription. According to Mr. Walsh the reading is *Ga-den Pho-dang chhog-le*

nam gyal, or "The Ga-den Palace victorious on all sides."¹ The reverse has in the centre a floral design, and around this are the eight lucky signs of the Buddhist religion. These are not always found in the same order on the coins. Beginning at the top, on No. 8, and reading to the right we find:— (1) the umbrella of sovereignty; (2) the two golden fishes of good luck; (3) the pot of ambrosia; (4) the lotus; (5) the conch shell; (6) the symbols of endless rebirth; (7) the banner of victory; (8) the wheel of empire. These pieces have evidently been recoined at various periods. Mr. Walsh mentions having obtained a machine-struck piece in 1902. No. 7 is probably one of the early ones, and No. 8 one of the later issues. Both are hand-struck, and it is doubtful if the machine-struck pieces could have been made for any long time.

Another type, known as the *Kong-par tang-ka* (Nos. 9 and 10), was minted at Giamda and dated in Tibetan figures, but in the Chinese cycle of sixty years which was introduced into Tibet A. D. 1026. The date is under a fanciful curve contained in a square, around which is a pattern imitating the *Sri, Sri, Sri* found on some Nepalese coins. The reverse is similar to the Ga-den tang-kas. This coinage was evidently resumed, as we find pieces of this type dated a hundred years apart. The known dates are as follows—the upper figures representing the cycle, and the lower, the year in the cycle:—
 $\begin{smallmatrix} 22 & 23 & 24 & 25 & 26 & 27 \\ 44 & 46 & 47 & 48 & 24 & 25 \end{smallmatrix} = \begin{smallmatrix} 13 & 13 & 13 & 15 & 15 \\ 44 & 46 & 47 & 48 & 24 & 25 \end{smallmatrix} = (1790, 1792, 1793, 1794, 1890, 1891).$ The pieces illustrated are those with the dates $\frac{13}{46}$ (1792), and $\frac{15}{24}$ (1890). All of them vary slightly in detail, but the type is the same; those of 1793 and 1794 are very crude and are of baser metal.

We now come to the conquest of Tibet by the Chinese, and the Sino-Tibetan Coinage. A mint was established at Lhasa in 1793, and was in charge of four officers jointly appointed by the Chinese Resident and the Dalai Lama. The coins were to be made of pure Sycee silver, of one ch'ien and five fên values, a tael of silver to exchange for nine of the former or eighteen of the latter. The coinage however does not bear this out, for with the exception of the first year, when four sizes were issued (though of only three different weights), the pieces are of but one value. The inscription on one side is in Tibetan and on the other in Chinese. The date is on the rim of both sides. Like the coinage of the province of Ili in Western China, it was ordered that in all subsequent reigns one-fifth of the issues should still be inscribed with the reign of Kien Lung, to commemorate that Emperor's conquests. In addition to the inscription in the field, on both obverse and reverse, there are four fleurets placed about the characters, and in the centre is a small square, which unlike the regular Chinese coins is not pierced. The borders are studded with large "pearls."

¹ This reading differs from that given by La Couperie.

The varieties I have noted are as follows : —

Obverse, In Tibetan, *Chhan Lung pau gtsang* = "Tibetan coinage of Kien Lung." On the rim, *Luga bchu rtsa brgyad* = "Fifty-eight."

Reverse, The same as on the obverse, but in Chinese, and on the rim, *Wu shih pah nien* = "Fifty-eighth year" (of the Emperor's reign) (1793); 31 mm.; wt. 86 grains. See No. 11.

Obverse and Reverse, Same as the preceding, but 26 mm., though the weight is about the same. Pieces of this size are also found much inferior in workmanship, which are probably later issues, in accordance with the edict that one-fifth of all subsequent issues should have the name of Kien Lung's reign.

Obverse and Reverse, As the preceding; 22 mm.; wt. 57 grains.

Obverse and Reverse, As above; 18 mm.; wt. 28 grains.

Obverse and Reverse, As above, but with the Tibetan and Chinese rim inscriptions reading "Fifty-ninth year" (1794); 26 mm.; wt. 57 grains.

Obverse and Reverse, As above, but the rim inscription reading "Sixtieth year" (1795).

Obverse, In Tibetan, *Chah chhen pau gtsang* = "Tibetan money of Kia K'ing." On the rim *Brgyad pa* = "Eighth."

Reverse, Inscription, the same as on the obverse but in Chinese. On the rim *pah nien* = "Eighth year" (1803). On pieces of this year only, the four fleurets are lacking on the reverse and the work is much inferior to the coins of other dates. See No. 12.

Obverse and Reverse, Same as the last, but "Ninth year" (1804), and the fleurets are restored on the reverse.

Obverse and Reverse, Same as the last, but "Twenty-fifth year" (1820). See No. 13.

Obverse, In Tibetan, *Dao Kwong pau gtsang* = "Tibetan money of Tao Kuang," and on the rim "First" (1821).

Reverse, Same as the obverse, but in Chinese.

Obverse and Reverse, As above, but "second year" (1822).

Obverse and Reverse, As above, but "third year" (1823). See No. 14.

In certain parts of Tibet Chinese cash pass current for small change, and in the southern part Nepalese pice are sometimes seen. The silver ingots of the Chinese are in common use, and are known by various names according to their weights. The silver miskals of Kashgar and Urumchi circulate in the northern part, and the British Indian rupees are accepted throughout the country, and exchange at the rate of three tang-kas. The rupee is known as the *Gor-mo*, "round coin," or *Phi-ling gor-mo*, "the foreign round coin." A few years ago the Governor of the province of Sze Chuan issued rupees, halves and quarters, in the similitude of the British Indian coins with the Queen's head.¹ In parts of Tibet, however, especially in the interior, coined money is little used. Business transactions are carried on by barter, and brick tea, — which is so generally used for this purpose that it is a recognized unit of value; the different qualities each bear a distinctive mark and pass at a different value.

HOWLAND WOOD.

¹ These were described at length and illustrated in the *Journal*, XLI: p. 29.

PRIVATE GOLD COINAGE:—CALIFORNIA.¹

VIII.

(Continued from Vol. XLVI, p. 149.)

THE reasons for the coinage by the private mints of California are not far to seek. It was a money of necessity, which the merchants and bankers tolerated because they were constantly expecting it would be speedily displaced by the lawful issues of the Government. But its need was felt by every class in the community. The miners welcomed it for the increased value it gave to their nuggets and dust; to meet the exorbitant prices demanded in the shops for the necessities of life, payment had to be made in a currency easily debased by means which the recipient had no ready method of discovering, and of which the intrinsic value was always uncertain at the best; the private coins with the fair professions on their face were the only alternative, and for a time met the emergency, so long at least as confidence in the integrity of the coiners continued; the irritating and inexplicable procrastination in the establishment of a Branch Mint fostered the hope that some plan would be discovered by which the law requiring payment of Custom House duties in coins struck by duly recognized authority might be evaded. The private issues were thus actually forced upon the public by the action of the Government itself, which while acknowledging the need, failed to provide a relief, except by the expedient, after long delay, of the establishment in January, 1851,² of a Government Assay Office.

When the Collectors of Customs for the different ports were first appointed, Gen. Kearny, in April, 1847, instructed them to receive only "specie, Treasury notes or drafts," in payment of duties. The only known variation from those instructions was the acceptance in that month by David W. Alexander, Collector for the Port of San Pedro, of \$1,700 in Government due-bills, under the questionable authorization of Lieut. Col. Fremont, who claimed to be the Acting Governor of California. When James Collier was appointed by the civil authorities as the first Collector to replace the official serving under the military *regime*, he received special instructions from Secretary Meredith, in a letter dated April 3, 1849, from the United States Treasury Department, in which he was told, "It is proper to advise you that you can only receive in payment of duties coins of the United States and such foreign coins as are recognized and their values established by Acts of Congress." Yet with a full knowledge of the dearth of such money in the State, the constantly increasing demand caused by the rush of adventurers from the East to the gold-fields, and the importation of merchandise to supply their needs, it was not until after the authorities had repudiated the products of the United States Assay Office that Congress authorized the establishment of a Branch Mint at San Francisco.

California had suffered much in her efforts to provide a stable coinage with which to conduct the ordinary every-day business of its citizens. When at last the United States Government established its Assay Office, it was hoped that like the previous

¹ Copyright, E. H. Adams, 1912.

² The first issues appeared the last of January, 1851. See *Journal*, XLV: p. 51.

expedients, it would soon be replaced by a Branch Mint, and that in the meantime its official stamp would not only guarantee to the miner a fair percentage of the precious metal for the possession of which he had borne so many privations and hardships, but would also rescue him from the clutches of the gold-dust brokers. It was regarded as a compromise, and as it seemed to guarantee the definite value of at least a portion of the bullion which circumstances compelled to serve in place of coinage, it was patronized to such a degree that very soon after it began operations the only circulating medium consisted of the octagonal slugs.

From the time of its establishment, so far as can be learned, private coins were invariably refused at the Custom House, but T. Butler King, the Collector of the Port of San Francisco, was instructed by Secretary Corwin to accept the ingots bearing the stamp of the United States Assay Office in payment of duties. Thereafter, and until October, 1852, importers were enjoying the relief which these afforded from the manipulations of the brokers, which compelled them to pay a premium for the privilege of changing a coin that had been demonstrated beyond any doubt, by the United States Mint Assayers at Philadelphia, to possess an intrinsic value of \$50.10, when presented there in bulk. Occasional complaints were heard, because the Assay Office could not at once coin any but the bulky pieces, which were likened to the "Plagues of Egypt," but the benefit was generally recognized when these were compared with the utterly untrustworthy character of a number of the private issues that had victimized every phase of California life in 1849 and 1850.

It was therefore a staggering blow to the mercantile community when the ingots with the stamp of the Government Assayer were refused by Collector King, in accordance with instructions from Assistant Secretary Hodge, of the Treasury Department at Washington, and the trivial reason was given that these issues of the Assay Office did not come within the requirements of the new United States law, which required that only gold coins of the standard of fineness of the regular coinage — $\frac{900}{1000}$ — should be received. While the ingots issued by the Assay Office could not be considered as coin, they might well be regarded as fulfilling the same functions — which they did, for there is no higher function of a piece of money than its acceptance for the payment of duties at one of the United States Custom Houses — and the circumstances under which they were struck, bearing the guarantee of the officials appointed by the Government itself, put them on an entirely different footing from all the necessity pieces which had preceded them.

The reason for this refusal was a mere technicality, which would have been laughable but for the serious consequences involved. This technicality lay in the fact that the coins of the Assay Office were not of the standard of fineness of the United States coinage ($\frac{900}{1000}$, as stated above), but only of the fineness of the average California gold, which ranged from 884 to 887 one-thousandths. But the same Act permitted the acceptance of foreign gold coins — those of Great Britain, France, Spain, Portugal, Brazil, Mexico and Colombia — at their intrinsic value, which was in all instances less than the value stamped upon their face. The authorities at Washington seem to have failed to see the absurdity of a decision which disparaged their own issues in favor of foreign coins. They

were blind to the fact that the Assay coins were the only medium permitting a great State to conduct a business the very foundation of which lay in the maintenance of a large force of miners in the Sierra Nevadas, engaged in digging out of old Mother Earth the precious metal in such quantities that, in the course of a few years, the stupendous amount of over a billion dollars' worth of the only real world-circulating medium was produced.

The action of the Treasury officials caused intense excitement among the merchants of San Francisco, and an indignation meeting was held on October 9, at which Ex-Governor Smith denounced the order, claiming that the Act of September 30, 1850, virtually made the ingots coins of the United States; Collector King replied, showing that it was impossible for him to accept the repudiated issues, under the law, without incurring personal responsibility, but he intimated that if a satisfactory guarantee against loss should be furnished by the merchants, he would be willing to assume that responsibility. If the ingots were $900/1000$ fine, he said, he believed they would be receivable. A Memorial was sent to Secretary Corwin, who apparently took no action upon it further than to call the matter to the attention of Congress in his annual report; and a bond was prepared as suggested. Representations were also made to Messrs. Curtis, Perry & Ward, of the Assay Office, which led them to strike pieces of the required fineness, and the trouble seems to have ceased,¹ as the papers of the day make no further mention of the subject. It is probable that the required standard was adhered to until the Office ceased operations on December 14, 1853.

The Act authorizing the establishment of the San Francisco Branch Mint was passed by Congress on July 3, 1852. The contract for the erection of the building was not taken within the advertised date, and on March 3, 1853, the time for receiving proposals was extended. During the following Summer arrangements were completed, and the site of the old United States Assay Office on Commercial, near Montgomery Street, having been fixed upon as the location, work was begun in the Fall. The contract was given to a Mr. Butler, at his bid of \$239,000, which was subsequently bought by Curtis, Perry & Ward, who made a new contract with the Secretary of the Treasury. The building was sixty feet square, and of three stories. It occupied twenty feet more width on the western side than its predecessor, which was forty by sixty feet. The construction was finished in the Spring of 1854, and the Branch Mint went into operation on April 3 of that year.

During the interim between the closing of the Assay Office and the opening of the Branch Mint, not one of the private mints was striking coins, and there was a dearth of pieces to supply the vacancy caused by the numerous shipments of previous issues, and the need became so great that thoughts once more turned to a private coinage. At the request of the merchants, the firm of Kellogg & Richter, both members of which had been connected with the Assay Office until it closed, began the issue of Twenty Dollar pieces, the first of which appeared in February, 1854.² Owing to many unavoidable delays which followed its opening, the Branch Mint was for a time unable to obtain the neces-

¹ See *Journal*, XLV: pp. 133 *et seq.*, for a full account of the meeting and subsequent action.

² See *Journal*, XLVI: p. 8.

sary acids with which to refine the gold to the United States legal standard, and lacked a sufficient amount of silver for the required alloy, and so the Assay office of Kellogg & Richter, which was governed by no restriction, continued to strike pieces from gold of the average fineness of 880 to 890 one-thousandths. Their issues promptly met all emergencies, and were continued long after the Branch Mint resumed operations.

In the Spring of 1854 the need of a Fifty Dollar piece, by which quick counting of large amounts of gold could be accomplished, again became manifest. The octagonal slugs had apparently disappeared from general circulation, having been remelted and re-coined in more convenient denominations, or shipped out of the country, and a petition was therefore sent to Congress by the San Francisco merchants, requesting that the Branch Mint might be allowed to strike Fifty Dollar coins, which should be similar in design to the Double Eagle, and circular in shape.

In regard to this petition the "San Francisco Herald" of March 1, 1854, said:

A petition has been circulated to-day, and very generally signed, addressed to the Congress of the United States, calling attention to the coinage that is to be made at the Branch Mint in San Francisco, and praying that a law may be passed authorizing the issue of Fifty Dollar pieces of the same shape and fineness as the United States Double Eagle. It will of course be signed by every business man in the community, the advantages of such an issue being self-evident. In a country like our own, where the currency is purely metallic, it is of great importance to have coins issued of a size which will admit of rapid and easy counting, both in receiving and paying money; and the experience of all our business men goes to show that in the absence of bank-notes the Fifty Dollar piece is the most convenient coin for such a purpose. The alteration in the shape, and putting the coin up to the United States standard, would make it all that could be desired. If such a coin should be issued, it would in all probability speedily reduce the premium on Ounces for East India shipments.

The petition was sent to Senator William M. Gwin, one of California's representatives in Congress. Mr. Gwin forwarded a copy of the Memorial to Secretary of the Treasury Guthrie, and received the following favorable response:

TREASURY DEPARTMENT,

March 21, 1854.

Sir: I have duly considered the Memorial which you placed in my hand this morning, of merchants and bankers of San Francisco, Cal., praying Congress to authorize the coinage at the Branch Mint at that place of gold-pieces of the denomination of Fifty Dollars. Upon the subject-matter of this Memorial you desire my opinion, and I have therefore the honor to say that in the present condition of California, as it respects its currency, the measure recommended would in my opinion be judicious and proper.

The large denominations of gold coinage are not found to be adapted to circulation in the Atlantic States. It is found that few of the Twenty Dollar pieces, and not a great many of the Tens, remain in private hands, but are soon passed into the possession of the banks and bankers, and their places supplied by bank paper. The larger pieces are also more convenient for transportation, and being thus carried to the South and West, prevent the transit of the smaller coins which would, if transmitted, remain in permanent circulation amongst the people of those sections of the country. For these and other reasons it appears to me to be desirable

to increase the coinage of the smaller denominations, and to diminish the larger for circulation on this side of the Union, and the increased capacity of the Treasury for coinage, arising from the establishment of the Branch Mint at San Francisco and of the Assay Office at New York, will enable us to carry this view into effect.

But there are peculiarities in the condition of California which recommend a different scale of coinage for that region. These are: First, the fact stated in the Memorial, of the prohibition and entire exclusion of paper money; and, second, the high scale of prices prevalent in California for commodities and service. These circumstances will make larger denominations of coin convenient, particularly in counting and passing large sums. To this may be added that time will be saved in coining, which may be of much consequence to miners and others, at least until the capacity of the Branch Mint shall be ascertained to be equal to the gold offered.

In order to harmonize the proposed large coins with the present recognized coins I would recommend that the coinage be authorized of pieces of \$100 and \$50 and \$25, to be called the "Union," "Half Union," and "Quarter Union"; but that the "Half Union" only be struck for the present.

I am, respectfully,

JAMES GUTHRIE,

Secretary of the Treasury.

The Memorial from San Francisco, together with the letter from the Secretary, was referred to the Committee on Finance.

Senator Gwin presented a Bill for the coinage of Fifty and One Hundred Dollar pieces, the text of which reads:

That there may be coined and issued by the United States, or by such of the Branch Mints as the Secretary of the Treasury shall direct, a gold coin of the weight of 2580 grains, of the value of One Hundred Dollars; and another of the weight of 1290 grains, of the value of Fifty Dollars, each of which coins shall be of the standard fineness now prescribed by law for the gold coins of the United States.

That the Secretary of the Treasury cause the necessary dies and other apparatus to be prepared by proper and skillful artists, under the superintendence of the Director of the Mint at Philadelphia, for coining the above coins, with such devices, motto, and figures as may be approved by the President of the United States, the expenses of which shall be defrayed from the ordinary appropriation for the expenses of the Mint and Branch Mints of the United States.

That the said coins shall be a legal tender and shall be received at their respective values as established by the Bill, in payment of all dues to the United States.

On May 29, 1854, Senator Gwin again brought the matter of the issue of Fifty and One Hundred Dollar coins to the attention of the Senate; discussion was postponed, but on June 16 that body passed his Bill by a large majority: it seems, however, never to have received the notice of the House, and therefore failed to become a law. As late as January, 1855, the San Francisco "Prices Current" stated that up to that time no information had come to hand from Washington, relative to the present coinage. But it is evident that the appeal of the merchants had not fallen on deaf ears, for early in 1855 each of the large concerns of Kellogg & Humbert, and of Wass, Molitor & Co. responded

to the demand by striking Fifty Dollar pieces, circular in form but of differing and original designs. On April 30, 1855, "Prices Current" announced that the private assay offices were still choked with business, and referring to the Fifty Dollar piece of Wass, Molitor & Co., remarked: "For city use it will be found useful on account of the superior facility it offers for rapid counting, but the difficulty of obtaining small change for it will, we think, preclude its general circulation in the interior."

The scarcity of acceptable coins had led to the proposition, early in March, 1855, that the issues of these two firms should be made a legal tender for duties, etc., and that their offices should each be constituted a Branch Mint, the Director of each to send to the parent Mint one piece out of every run, for assay, — hoping thus to relieve the situation. No action was taken on this proposal, but all through the month of April the assay offices were working night and day, and yet could not keep pace with their deposits.

"Alta California" of October 23, 1855, contained the following article in regard to the condition of California's currency:

There probably never has been any single State in the Union so imposed upon with a mixed and debased currency as California. Even before her adoption into the Union as one of the Federal States the evil began, and the old Spanish or Mexican currency of Ounces and Dollars and their subdivisions was interfered with by clipped coins from the southern coast, adulterated Dollars from Bolivia, "Milreis" from Brazil, and other pieces the value of which would puzzle the Director of the Mint to determine. The discovery of gold in untold quantities in our mountains created a still greater demand for coin, which had to be supplied by some means or other, and in the absence of legalized issues private coiners commenced operations, and we had "Beaver" pieces from Oregon, Mormon coin, both from Utah and various points in the State, not to speak of "S. M. V.," "Wright's Miner's Bank," "Baldwin's Half Eagles," etc., etc. These have all passed away, and although many of them were practically a "shave" on the recipient, in value, they answered a good purpose. The presence of an assayer, be he good or bad, helped the miners by establishing a standard of gold, and by the time that Mr. Humbert (a man who has done more than any single person we know of, and has met with no reward at all commensurate with his services) had got through his labors as a United States officer, most of them had disappeared.

The age of gold having passed away, that of silver came into full operation, and we were deluged with Francs, Pistareens, Double Reals, and countless other pieces, all going to represent Quarter Dollars, and ranging in value from 16 to 18 $\frac{3}{4}$ cents. We need not recall to the recollection of our readers the position of our currency a year ago. It presented a perfect anomaly. Four single Francs for all purposes of business equalled in value a single piece of Five-francs. Four Pistareens (sixty-four cents) ranked as equal to a Spanish milled Dollar, worth with the premium certainly \$1.05. The New Granada eighty-cent Dollar was equally worth \$1.05 (the Spanish milled Dollar), and sixty-four cents (say, four pistareens). Everything in a word was confusion, worse confounded.

The evil at last was so great that it became imperative on the part of the bullion dealers to make an effort to stop its course. The importation of Francs, which had been carried on to a great extent by outside operators and a few foreign houses, was stopped by the action of the bankers in refusing to take them for more than twenty cents, which, although representing a

trifle over their real value, sufficed to drive them out of circulation. In fact, as soon as the rate became reduced in banks the value sank still further outside, and in common trade they were passed for only $12\frac{1}{2}$ cents, or $7\frac{1}{2}$ cents less than they were actually worth.

The movement made last year was a good one, but it did not go far enough. We might almost say now that the ages of both silver and gold were passed, but that the age of brass had set in. We have at present in circulation a Pistareen (value 16 cents); the Chile Double Real (value about 19 cents); the Rupee (value 44 cents), and a number of German and Spanish coins, the value of which we cannot at the moment determine, but which all pass in common for twenty-five cents, the Rupee ranking at fifty cents, or six cents more than its actual value. We have also the Sovereign, passing for \$5, when its actual value is but \$4.85; the Napoleon, value \$3.88, passing for \$4, and Thalers, \$3.88, and Double-thalers, \$7.74, circulating for a large advance on their actual worth. . . .

In 1856, notwithstanding the fact that the Mint was in operation and coining several million dollars' worth of gold monthly, the prevalence of private issues was as great as ever, the California coins as a matter of fact comprising nearly the whole of the local circulation; yet the Mint alone was striking coins, the assay offices of Kellogg & Humbert, and Wass, Molitor & Co., having ceased their private issues in 1855. At this time it was estimated that from five to eight million dollars' worth of private coin were in circulation, which were held at a nominal value of one-half of one per cent. in excess of their value at the Mint.

Several conferences were held in the latter part of March, 1856, by the leading merchants and bankers, for the purpose of providing some means of excluding this private coin from circulation and restoring the currency of the State to a more reliable basis. At a meeting held on March 25, at the office of Alsop & Co., to take action, the following merchants and bankers were represented:—Macondray & Co., Alsop & Co., Goodwin & Co., Eugene Kelly & Co., Flint, Peabody & Co., Cross & Co., Dupuy, Foulkes & Co., Samuel Price & Co., F. and H. Selby & Co., Morgan, Hathaway & Co., James Patrick & Co., Bond & Hale, Seligman & Co., Dewitt & Harrison, Arrington & Co., J. B. Thomas, and William O. Dow, and the following Resolutions were adopted:

Resolved, That, in our opinion, the time has arrived for placing the currency of this State on a sound basis, and that to continue to receive as currency private coinage is attended with present inconvenience and possible loss to the community.

Resolved, That we use all legitimate means to discountenance the circulation of private and illegal coin.

A committee of three members, Messrs. Flint, Minturn, and Bissell, was appointed to wait upon the bankers and request them to take such steps as they might deem expedient to carry out the views expressed. This committee found that a majority were favorable to the plan, and an agreement was entered into by all the banking firms except two, to the effect that they would receive private coin on deposit only at one-half per cent. discount. Because of the refusal of the two bankers mentioned to sign the agreement, several others withdrew their names, which resulted in the arrangements being dropped.

The "San Francisco Bulletin," of April 10, 1856, makes the following editorial comment upon the action of the merchants and bankers, and the refusal of some of them to join the movement to drive private coins from circulation, and this may be regarded as a clear exposition of the situation.

. . . . The fact that the meeting seems to have been confined to the larger class of houses, comprising by the way some of the best names in the city, however objectionable it may seem (and it does so seem to us), on the ground of its being a movement restricted to a few persons and therefore liable to the suspicion of having private ends in view, should not prevent a fair inquiry into the case. The interests of larger merchants are undoubtedly more directly affected at present than the smaller ones; but a further inquiry will show that, in looking after their own interests, they are also acting for the good of all. At some time or other this private coinage must cease, and that of the Mint be the only currency. It is right it should be so, because in the Mint the public have the only sure guaranty that they will be protected. In the absence of a Mint to supply our wants, private coinage has been of much benefit to our people; but that time has passed, and the question arises whether this coinage should not be stopped at once? We think it should be, and the loss of one-half per cent. had better be suffered now at the present, than at a later period on a much larger sum. The bankers of course feel a reluctance to start this matter, because it will be thrown back at them that they had an active part in getting the money in circulation, and this the bankers cannot deny. They will, however suffer their proportion of the loss, for until there be a general agreement to refuse this coin the bankers cannot do otherwise than take it at the counter, and all their efforts to "work it off" will prove ineffectual.

The American decimals are not the only coins that have been made in this city. It is well known that Woods had a contract with Santa Anna to coin Mexican Ounces in this city, under the sanction of the Mexican Government. Woods sent Sam Ward to Mexico, and Ward agreed to pay the one-legged Dictator a certain sum for the privilege. Drafts were drawn on Adams & Co., and, as we understood, were cashed in Mexico, Santa Anna pocketing the proceeds. Woods accepted the drafts here, but as far as we can learn they were never paid, as before they became due Adams & Co. had failed. The Ounces were coined on Montgomery Street, and when, after the failure of Adams & Co., we heard of the gold-dust "doctoring," we at once suspected there was some doctoring about these Ounces, which we believe were all shipped to China, through Bolton & Baron, who bought them of Woods' broker, without knowing anything about where they were made. It was thought best to say nothing about this affair until a return from China could be had, to see if the Ounces were of good weight and fineness. We were subsequently told that returns had been received, and the coin [found to be] both of full weight and fineness, and then, so far as Woods was concerned, the matter was dropped, for it was very questionable whether with the sanction of the Mexican Government any law had been violated, unless it could be proved that the coin fell short of the value it purported to be.

It is admitted, we believe, that no law exists to prevent the private coinage of Kellogg & Co., which coin, as successor to [that of] Moffat & Co., has always stood fair, and has never been questioned. But when it is borne in mind that Mr. Kellogg is not bound to redeem that coin in case it should fall short, it will be admitted on all hands that if the Mint be able to supply the wants of the community, we had better confine our currency to the issues of that establishment. It is said that Kellogg & Co. are not now making any of this coin, have not been doing

so for some time, and do not intend to. If this be so, then Mr. Kellogg's interests are not affected at all, and the matter rests solely with the people.

One objection alleged against this coin of Kellogg's is that not having as much alloy as the Mint coin it is softer and wears away faster. This is a good reason for getting it out of the way before it wears off too much. Supposing the amount of private coin in circulation to be as large as stated, — \$8,000,000, — the loss to the entire community at one-half per cent. discount will be \$40,000. Has not the evil extended far enough, or shall we wait until, by the wearing away of the coin, the percentage be increased to one instead of one-half per cent.? We are decidedly in favor of stopping it where it is, and we think this meeting of merchants, in looking to their own direct interests have been also caring for the public good. All the bankers except two, we are told, agreed to the wishes of the merchants. These two were Messrs. Tallant & Wilde, and B. Davidson. The reason urged by Tallant & Wilde was that one-half per cent. was not enough to pay for recoinage or for shipping. Mark that! "Not enough!" If one-half per cent. be not enough now, what will be enough for a year hence?

For the present, we simply remark that we regard this matter as one of those evils which the sooner remedied the better. Medicine is not pleasant at any time, but if the nauseous draught produce a cure, the sooner it be taken the better for the patient. The bankers are no more to be blamed for circulating this coin than any other class. Mr. Kellogg is not to be blamed, for at the time he issued the coin it was needed, and it has been of great convenience in all commercial transactions. The public are not to be blamed, although they are now about to suffer the loss. The whole blame rests on the Federal Government, which, by not supplying us with a Mint when we needed one, forced us to adopt the only remedy left us. The public unfortunately are the sufferers throughout. They suffered in the case of Wright, Baldwin, and other coiners. They suffered in the United States Assay Office slugs, and now the winding-up, that all foresaw must come sooner or later, has at last arrived, and we have now to suffer in this Moffat-Kellogg coin, which was among the first, is the last, and has been to the people the best of the whole. Well, let it come; it is the last, and the sooner it is over the better. These are our opinions. If any of our readers differ with us, our columns are open to them.

In the Summer of 1856 the demand for gold coins in San Francisco for export purposes again became so great that the entire product of the Mint was shipped away as fast as it was struck. When the Mint was forced to close for repairs, in September, only a small amount of the United States coinage was available, and it once more became necessary to fall back upon the supply of private issues, for export, even though this involved a loss of one per cent. as against the regular coins. Even these — great as seems to have been the supply that still lingered — were not sufficient for the demand, and no less an authority than that of "Prices Current," San Francisco's leading commercial paper, stated on September 19, 1856, that with the Mint still closed, there was a strong probability that the merchants and bankers would again be obliged to have recourse to private coinage, with which to carry on business, in case it did not soon resume operations. "As it is," it said, "a large portion of the old private coins have been shipped out of the country." But a fortnight later (October 4, 1856), the same paper tells us that the assay offices were striking no coins; the Mint was soon at work again, and thus, so far as general circulation was concerned, the private gold coins of California quietly passed out of existence.

NUMISMATIC PERIODICALS.

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THE following list of periodicals devoted entirely or very largely to numismatics may be of interest, as showing the immense amount of work that has been done in the science. Many of these publications came to an early and unlamented death. The discontinuance of many others, like *La Gazette Numismatique française*, has been a very real loss.

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THE MEDALS, JETONS, AND TOKENS ILLUSTRATIVE OF THE SCIENCE OF MEDICINE.

(Continued from Vol. XLVI, p. 134.)

XII. AUSTRIA (continued). C. *Medical Events*. (Continued.)

- Pregnancy of Elizabeth, wife of Karl VI, 1723 (continued).
 2767. *Obverse*. Bust, to right. Upon truncation: s Inscription: CAROL · VI · IMP · — · ET · III · HISP · REX
Reverse. Upon the sea, a bivalve shell containing pearl. Legend, in semi-circular space: · CÆLO · CONCEPTA · SERENO Exergue: FÆCVNDITATI | AVGVSTÆ
 Bronze. 15. 24mm. In the Boston collection.
 2768. *Obverse*. Two heads.
Reverse. Bohemia seated, with view of Prague. Legend: BOHEMIA FELIX ·
 Silver. 25. 37mm. Helbing Cat., March, 1893, No. 69.
 2769. *Obverse*. Sun, moon, and earth, with labels. Legend: SOLIS AB ADSPECTU LAETIOR (etc.)
Reverse. View of Prague, beneath a crown. LAETIOR IN PRAGA (etc.)
 Silver. 29. 44mm. Voigt, IV, 159.
 Confinement of the Empress, 1726.
 2770. *Obverse*. Head. Inscription: ELISABETHA CHRIST · ROMAN · AVGVSTA
Reverse. Fame, blowing upon two trumpets. Inscription: GAUDETE, ELISABETHA CHRISTINA PEPERIT FILIUM. Exergue: XIII, APRILIS.
 Poulharies, p. 99, No. 95; Storer, Medals of Obstetrics, No. 7.
 Third pregnancy of Maria Theresa.
 2771. *Obverse*. Bust, to right. Inscription: MAR · THER · AVG · ROM · IMPER ·
 Exergue: I. L. Æ(xlein.)

Reverse. Beneath hovering imperial eagle, crowned, two nude children, with armorial shield between them. Above: EXPECTANT TERTIUM. Exergue: VOTA PUBLI- | CA. Silver. 13. 20mm. In the Boston collection.

Ninth pregnancy of Maria Theresa, 1757.

2772. *Obverse.* Bust, to right. Arms, and the Austrian eagle above. Inscription: ARCHIDVCVM GENETRIX DIVVMQVE HOMINVMQVE VOLVPTAS

Reverse. Empress with two children on lap, and surrounded by five others; over the throne two stars, her dead children. Inscription: MARIA THERESIA · AUG · NOVIES FECVND A

Silver, bronze. 14. 22. By CExlein. Schaumünzen Maria Theresias, p. 107, No. 84.

2773. *Obverse.* Bust, to right. Beneath: I. L. CEXLEIN. Inscription as on preceding.

Reverse. Group as on preceding, the empress upon throne with canopy reaching to clouds, which distil dew. At right: I. L. C. Inscription: MARIA THERES · AVG · — NOVIES FECVND A Exergue: NAT · CAES · PRINC · | MDCCLVII

Silver, tin. 25. 41mm. In the Boston collection.

Death of Arch Duchess Maria Josepha, of Small Pox, 1767.

2774. *Obverse.* Bust, to right. Beneath: WIDEMAN Inscription: M. JOSEPHA AUSTR · FERDIN · IV · UTR · SICIL · REGI · DESPONS · 8 SEPT · 1767.

Reverse. An angel with torch flying to right, with female holding its wing. Beneath, to right: P K (Peter Keiserswerth) Inscription: AD AETERNAS NVPTIAS DVCTA XV. OCT. MDCCLXVII. Exergue: NATA XIX. MARTII | MDCCLI.

Silver, bronze. 25. 42mm. Pfeiffer and Ruland, p. 138, No. 381; Pfeiffer, 1896, p. 2, No. 381. In the Boston collection.

Recovery of the Empress Maria Theresa, from Small Pox, 1767.

2775. *Obverse.* Bust, to right. Beneath: M · KRAFFT · F · Inscription: M · THERESIA D. G. ROM · IMP · HUNG · & BOH · REG · A · AUST ·

Reverse. Under divine eye Hygeia presiding over imperial arms, which Minerva crowns with laurel and a cupid supports with burning heart in hand. To left, Saturn pointing to Hygeia holds a re-entering serpent, to complete with a fess argent (cross-bar) the arms of Austria, in allusion to the service done by Aesculapius. At base, to left: K(rafft) Legend: PROVIDENTIA — VOTIS ET — ARTE Exergue: PARENTI — OPTIMÆ | CLEMENTI IUSTÆ | RESTITUTA SALUS | 1767 ·

Silver, gilt, tin. 36. 58mm. Moehsen, I, p. 9, fig.; P. and R., p. 136, No. 375; Schaumünzen Mar. Th., 198; Schoenvisner, Notitia Hungariae rei numariae, p. 441, pl. XIX, No. 379; Pfeiffer, 1896, p. 2, No. 375. In the Government collection.

2776. As preceding, but without K on reverse.

Silver. 36. 58mm. In the Boston collection.

2777. *Obverse.* Bust, to right. Beneath, to left: A · WIDEMAN · Inscription: M · THERESIA · D · G · ROM · IMP · GER · HUNG · & BOH · RE · A · A ·

Reverse. A female with censer kneeling at an altar. At right of platform: A W Legend: DEO CONSERVATORI AUGUSTAE Exergue: OB REDDITAM PATRIÆ | MATREM 22 IVLII | MDCCLXVII

Silver. 29. 46mm.¹ Moehsen, I, p. 17, fig.; P. and R., p. 137, No. 376; Schoenvisner, p. 441, pl. XVIII, No. 375; Pfeiffer, p. 2, No. 376. In the Government and Boston collections.

2778. *Obverse.* Bust, to right. Inscription: M · THERESIA | D · G · R · — IMP · HU · BO · REG ·

¹ Distributed with the two following, when the Em- Church. press was on her way to return thanks at St. Stephen's

Reverse. As preceding, save 1767.

Silver. 16. 23mm. Edges milled. P. and R., p. 137, No. 377; Pfeiffer, p. 2, No. 377. There are three varieties of this type. In the Government and Boston collections.

2779. As preceding, save M. THERES.

Gold, silver. 14. 31mm. Edges milled. In the Government, Boston and University of Pa. collections. There are two varieties, both being in the Boston collection.

2780. *Obverse.* The letters NB, in large monogram. Legend: VIVAT DIV AC LÆTE CONSTANTER AMEN (rosette) = 1767 Exergue: EX ORE ET CORDE | HUMILL: DEVOTIS:

Reverse. Above, the eye of God. Legend: DEO | SIT GLORIA | — | MARIA · THERESIA | PER PRECES NOSTRAS | VERE SINCERAS | NOBIS | RESTITUTA EST = 1767

Silver. 29. 46mm. Struck by the Landgrave Ludwig VIII of Hesse Darmstadt. P. and R., p. 137, No. 379; Pfeiffer, p. 2, No. 379. In the Brettauer collection.

2781. *Obverse.* Mailed bust, to left. Inscription: CAR · ALEX · LOTH · — · DUX BELG · PRAEF · Beneath shoulder: R (oettiers).

Reverse. A female to right, erect, extends a crown towards sunbeams from clouds. At right, a lion. Legend: DEO SOSPITATORI — AUGUSTÆ Exergue: BELGICA | GRATULABUNDA | MDCCLXVII

Silver, bronze. 27. 34mm. Edges milled. Méd. de Mar. Th., No. 200; P. and R., p. 137, No. 380; Coster, Jetons historiques, p. 197, No. 841; Piot, Cat. des Coins, etc., p. 94, No. 64; Pfeiffer, p. 2, No. 380. In the Government and Boston collections.

Newport, R. I.

HORATIO R. STORER.

ANNIVERSARY MEDAL OF CARDINAL O'CONNELL.

HIS Eminence, William, Cardinal O'Connell, Archbishop of Boston, has caused a medal to be struck commemorative of the first anniversary of his elevation to the Cardinalate, and has kindly presented us an example for the Society's cabinet. The obverse has an excellent likeness of the Cardinal in profile to the left, in high relief, and in his official vestments. He wears the small biretta, the cope with hood, and the pectoral cross. Legend, GVLIELMVS · S · R · E · PRESB · CARDINALIS · O'CONNELL † ARCHIEP · BOSTON (William, Cardinal Priest of the Holy Roman Church, O'Connell, Archbishop of Boston.) Under the last words of the legend, in small letters, incused, is the name of the artist, DORA OHLFFSEN On the reverse is an armorial shield, the dexter side displaying the arms of the Archiepiscopal Diocese, — on a field azure a Latin cross argent over three hills vert (?), for Trimount or Boston; these are impaled with the personal arms of the Cardinal, on the sinister side of the escutcheon, — a stag trippant between three crosses. The tinctures on the sinister are not indicated. Over the dexter side of the shield is a mitre, and over the sinister, the head of a baculus, or pastoral staff; between these rises a cross bottony patriarchal, or double-barred crozier, — symbolizing his ecclesiastical dignities of Bishop and Archbishop. Over the latter cross, the staff of which shows beneath the shield, is the Cardinal's hat, with cords

from which hang tassels in five rows, each increasing from one to five, and alluding to the five grades of Holy Orders — Deacon, Priest, Bishop, Archbishop and Cardinal — which he has received.

On a ribbon-scroll beneath the shield, VIGOR · IN · ARDIS which we may perhaps read "Strong in trials." Legend, · CREATVS · XXVII · NOV · MCMXI † REGNANTE · PIO · X · P. M. † (Created November 27, 1911, Pius X, Chief Pontiff, reigning.) Bronze, size 60mm. M.

TWO RECENT CHINESE DOLLARS.

WE illustrate in this number the last of the Chinese Imperial Dollars and the first of the Republican pieces. The Imperial Dollar was put into circulation during the revolution that caused the downfall of the Manchu dynasty; this was part of the long-contemplated issues for general use throughout the Empire, under the new uniform monetary standard which was to take the place of the various Provincial issues. The obverse has the Imperial dragon amid seven clouds, three to the left and four to the right, the device surrounding two Chinese characters — *Yih Kwan* (one dollar): at the bottom, in English, ONE DOLLAR. The reverse has in the centre within a beaded circle, four Chinese characters — *Tai Ching Yin Pi* (Silver money of the Tai Ching dynasty), in place of the more common inscription on the previous pieces, Kwang Hsu Yuan Pao (Initial coinage of Kwang Hsu). Above the circle are four Manchu words, and below are four Chinese characters meaning, "The third year of Hsuan Tung," — the boy Emperor who was dethroned. On each side is a spray of chrysanthemums.

The execution of this Dollar is far superior to that of any of the preceding Provincial coinages. The English words "One Dollar" here appear for the first time, and take the place of the old legend, 7 MACE AND 2 CANDAREENS, though the Chinese characters *yih kwan* have occasionally been used on some of the earlier pieces, as for example those of the twenty-fourth year of the Pei Yang Arsenal (the Chih-Li Mint), and of the same year of the Fung Tien issues.

The Republican Dollar offers many departures from previous Chinese money. On the obverse in the centre, within a linear and beaded circle, is the portrait of Dr. Sun Yat Sen in profile to the left; above are four Chinese characters, meaning "Chinese Republic"; at the bottom are five characters, meaning "Commemorative coin of the opening of the country." On each side is a spray of peach-flowers. On the reverse, in the centre within a similar circle, are the two Chinese characters meaning "One Dollar," partially enclosed by an open wreath of rice and beans. Legend, in English, THE REPUBLIC OF CHINA ★ ONE DOLLAR ★

PROCEEDINGS.

THE AMERICAN NUMISMATIC SOCIETY.

At the regular Meeting held November 16, 1912, the Council reported as follows :—

As reported at the April meeting, Mr. Samuel P. Avery has offered to be one of four contributors, of twenty-five hundred dollars each, to a fund of ten thousand dollars, the interest of which shall be used for the increase of the Society's collections. Mr. Archer M. Huntington and Mr. J. Sanford Saltus have agreed to contribute to this fund, leaving but one contributor of twenty-five hundred dollars to be obtained. As this proposition is only open until the first of the year, it is to be hoped that the full amount will be made up prior to that date.

The Council would report that since the last meeting of the Society, the following new members have been elected :— Honorary Member, His Majesty Albert, King of the Belgians ; Corresponding Member, The Numismatic Society of Dresden ; Associate Members, The Joseph C. Mitchelson Collection at the Connecticut State Library, Hartford, Connecticut, Dr. J. Livingston R. Morgan, New York, Mrs. Francis Rolt-Wheeler, New York, Rev. Hugh W. White, Yen-cheng, China.

The Society has lost by death the following members :— September 7, A. Loudon Snowdon, Honorary Member, elected March 18, 1879 ; September 22, Ferdinand Hermann, Life Member, elected January 16, 1893 ; October 6, Andrew G. Agnew, Life Member, elected December 21, 1908 ; October 8, Morris Loeb, Life Member, elected November 17, 1909 ; November 13, John T. Willets, Life Member, elected May 15, 1883.

The Director reported as follows :—

The accessions to the Library since the last report have been eighty-four books, thirty-two pamphlets, three hundred and twenty-four periodicals, one hundred and twenty-seven catalogues, and an autograph letter of Gerard van Loon, dated March 5, 1736. To the Collections have been added seventy-one coins and tokens, one hundred and seventy-five medals, plaques, etc., twenty-two decorations, nine plaster casts, and seven hubs and dies, including the cross of the Distinguished Service Order of England, and fifteen British war medals, the most important of which is the field officer's gold medal of the Peninsular War, which was awarded to Captain Francis Scott, who lost his life leading the forlorn hope at the assault on St. Sebastian, in 1813, six English medals awarded to firemen for long service or acts of bravery, a most interesting French decoration, consisting of a branch of oak suspended from a wide tri-colored ribbon (probably of the period of the French Revolution, but of which I have, so far, been unable to obtain any definite information), the medal worn by a member of the French Council of Five Hundred, in 1797, whose name is engraved upon it, sixteen foreign decorations, British gold and silver coins of the present year, and other interesting coins and medals from Mr. J. Sanford Saltus. Seventy-four coins and medals, including eight medals made of wood, from Mr. Samuel P. Avery. Fourteen medals and plaques in copper gilt, galvano and plaster, by Signor Giovanni Cariatì, and eight medals and plaques by Monsieur Louis Patriarche from the respective artists. Twenty-five Masonic Chapter Mark Pennies

from Mr. David R. Gibson, and thirteen from Mr. William Poillon; also a considerable number of smaller donations.

The Rev. Hugh W. White, who is connected with the American Presbyterian Mission at Yen-cheng, China, has deposited his collection of coins here as a loan, which he states will probably be for several years and possibly permanent. This collection contains something over one thousand specimens, and is largely made up of modern coins of China and neighboring countries.

The Ro Collection of Ancient Chinese coins is still on exhibition in our cases, the owner having kindly allowed it to remain for a much longer period than at first intended. This is one of the largest collections of its kind in existence, and it is to be hoped that some way may be found to retain it permanently.

The number of visitors to the building has been as follows:—April, seven hundred and forty-three; May, five hundred and twenty-nine; June, two hundred and eighty-two; July, two hundred and forty-five; August, five hundred and twenty-three; September, five hundred and six; October, five hundred and sixty-four.

The Chairman, Mr. Drowne, announced the subject at the meeting—an informal discussion and exhibition of the Siege and Necessity Coins.

Mr. Albert R. Frey read a short paper on the gold coin of Poland, issued during the insurrection of 1831; the gold, silver and copper coins struck at Barcelona, 1808 to 1814; the two-real piece of San Salvador, 1821, and the "Hobby Horse Ducat" of Nuremberg, 1650.

Mr. Edward T. Newell gave a brief history of the coins struck during the siege of Jerusalem, A. D. 69 and 70.

Mr. S. Hudson Chapman spoke of the Gun Money of James II, and other Necessity Coins of Ireland.

Rev. Dr. James B. Nies described some interesting notes, issued by General Charles George Gordon (Chinese Gordon), during the siege of Khartoum in 1884.

Remarks were also made by Mr. A. H. Cooper-Pritchard and Mr. Henry Russell Drowne.

Exhibitions of Siege and Necessity Money were also made by Messrs. Frey, Newell, Chapman and Pehrson, and from the Society's collection.

BAUMAN L. BELDEN, *Secretary*.

A regular meeting of the Society was held Monday, December 16, 1912, Mr. Henry Russell Drowne, one of the Governors, presiding.

The Council reported as follows:—

It has been decided that, in future, the Society, through its Publication Committee, issue the *American Journal of Numismatics*, and Transactions of The American Numismatic Society, in a single volume at the end of each year. The next quarterly number, which will be out very shortly, will be the last to be issued in this form. The subscription price will be unchanged.

It is also proposed to issue at intervals monographs on subjects of numismatic interest, which will be distributed to the members of the Society.

The Society has issued a large volume describing and illustrating a series of medals on the important events of the reign of Napoleon. These medals were never issued, though the designs were all prepared. This book is by Ernest Babelon, who discovered the records and designs. It will shortly be offered for subscription to the members of the Society.

The Council would again bring to the attention of the members the generous offer of Mr. Samuel P. Avery to be one of four donors of \$2,500 each to a fund of \$10,000, the interest of which is to be used for the increase of the Society's numismatic collections. Mr. J. Sanford Saltus and Mr. Archer M. Huntington have agreed to become donors to this fund, and as the offer is only open until the end of the current year, a fourth donor must be found very soon if this most important and much-needed fund is not to be lost to the Society.

The Society has lost by death the following members :—

October 27, Monsieur Frederic Vernon, Corresponding Member, elected December 17, 1910.

December 8, Gen. Gates P. Thruston, Corresponding Member, elected May 20, 1879.

December 10, Mr. John T. Atterbury, Life Member, elected January 20, 1902.

The Director reported as follows :—

The accessions to the Society's collection since the November meeting consist of seventeen plaques by Miss Janet Scudder, and two medals from Mr. Archer M. Huntington, six British coins of this year, the gold medal given by the British Foreign Office for gallantry and humanity, the British naval gunnery medal of George V, and ten other medals from Mr. J. Sanford Saltus; from His Eminence Cardinal O'Connell, of Boston, a medal commemorating the first anniversary of his elevation to the cardinalate, and a galvano plaque entitled the "Adoration of the Virgin," by Giovanni Cariati, from Mr. Edward D. Adams.

The accessions to the Library consist of one book, two pamphlets, eleven catalogues and sixteen periodicals.

The number of visitors to the building during the month of November was nine hundred and fifteen.

The exhibition of medals, plaques and drawings by Signor Giovanni Cariati was opened to invited guests on December 11th, and to the public on the following day, and will remain open until the last of this month.

As stated at the last meeting, an exhibition of medals and other objects relating to Joan of Arc is to be held next month, and if the present plans are carried out it will open on January 6th. This exhibition will contain the Society's collection of medals relating to Joan of Arc, and a large number of prints, photographs and books, which have been loaned for that purpose, as well as some valuable paintings and statuary which have been promised.

An amendment to Chapter V, Section 1, of the By-Laws, changing the title of the Committee on Publication of the *Journal* to Committee on Publications, was presented, and notice given that it would be brought up for action at the next meeting.

The Chairman announced the subject of the meeting: Informal discussion and exhibition of the coins and medals of the Reformation. Remarks were made by Messrs. Albert R. Frey, Herbert Niklewicz, David Proskey and Henry Russell Drowne. Exhibitions were made by Messrs. Drowne, Niklewicz and Proskey, and from the Society's collection.

The meeting then adjourned.

BAUMAN L. BELDEN, *Secretary*.

ANNUAL REPORT OF THE FRENCH MINT.

THE Annual Report of the Director of the French Mint, for the year 1911, has been issued. It covers work done in 1910-11, during which the production was considerably less than in the previous year, due in part to the damage resulting from the overflow of the Seine in the great floods at the beginning of the year, and the temporary closing of the Mint for the installation of new machinery. The diversion of a large number of workmen to meet the greatly increased calls for medals, during the year, made a noticeable reduction in the number of coins struck; notwithstanding these hindrances, the issue of gold increased 139 million francs, and more than 20 million francs in fractional silver. Upwards of 11 million pieces in piastres and francs were also coined for the French colonies in Indo-China.

From the sale of medals in 1910 the Mint received 1,327,012 francs, an increase of 220,000 above the preceding year. In the year (which includes the first half of 1911), seventeen new medals were struck, illustrations of several of which are given in the Report. A chapter on the monetary legislation of Portugal is an interesting contribution to numismatic literature, and a characteristic feature of these annual reports. M.

OBITUARY.

CHARLES EDOUARD VAN DEN BROECK.

By the death of M. Van den Broeck on the first of March last, in his ninety-second year, the numismatic fraternity has lost one of its oldest members, if not the senior of them all. He was elected a Corresponding Member of the *Société royale de Numismatique* of Belgium in 1862, and an active member two years later, when he was chosen Treasurer of the Society, an office which he held for thirty-six years, receiving the bronze, silver and gold medals of the Society, in recognition of his most satisfactory service. On the fortieth anniversary of his election his associates presented him with a medal, the obverse bearing his portrait in profile, executed by Devreese, with a suitable inscription on the reverse. He was also honored by the King, who conferred upon him the Order of Leopold in 1888, and made him an officer of the same Order in 1907. Probably none of his associates was as familiar as he with the numismatic history of Brussels, especially the various jetons of that city struck at various periods since the fourteenth century, and on which he published numerous papers. One collection of 330 of these pieces, which was purchased by the State, is of special value to the older families of that city, from a genealogical and heraldic point of view, because of their armorial devices. No member of the Society was more highly esteemed, and he will be greatly missed from its gatherings.

BOOK NOTICE.

THE MEDALLIC HISTORY OF NAPOLEON.¹

A REVIEW BY FRÉDÉRIC MASSON, OF THE ACADEMIE FRANÇAISE, OF THE WORK BY M. ERNEST BABELON, MEMBRE DE L'INSTITUT, published under the auspices of The American Numismatic Society. — (*Translated for the "Journal" from Le Gaulois: Paris, August 18, 1912.*)

NEAR as it is to our time, the history of Napoleon is full of surprises. One might think that after the certainly considerable number of studies already made, we had exhausted what could be written on the subject of the medals imagined, designed, or struck under the Empire. Since 1818, in England, France, Germany, everywhere, publications had accumulated; in England, those of Captain Laskey, of Miss Anna Mudie Scargill, of Millingen; in France, the *Trésor de Numismatique et de Glyptique*, and the various catalogues of the Museum of the Mint; in Holland, the two works of Count Nahuys; in Germany, Van Heyden's work; in Denmark, that of Mr. L. Bramsen; lastly, there was advertised as soon to appear, under the direction of one of the best-known scholars, a minute description of the invaluable collection formed by the Prince of Essling, which comprises all the medals of Napoleon struck throughout the world during his lifetime or since his death.

By the side of these works, whose purpose is the enumeration, description, or reproduction of realized medals and medallions (it will not do to say struck, for many of the medallions reproduced in the *Trésor de Numismatique* were cast), should figure the medals imagined or designed, but not realized. The first of these medallic histories dealing with imagined medals was the *Napoléonide* by Petroni, which appeared in Italy with quite coarse plates, and was republished in France by Didot, together with some other designs by Pécheux. And this was followed by hundreds of others. There exist, in particular, contemporary sets put up in boxes; they are shaped like medals in repoussé, the engraving is done with great delicacy, and they form a quite curious sort of chaplet. Under the second Empire clumsy imitations were made of these older series, with which may be compared certain medallion-engravings, probably intended to be placed under glass on top of candy boxes, but forming a sequence, some of which are highly colored. But all these are as nothing compared to the admirable manuscript which for nearly a century has remained unknown, save to a few rare investigators, in the manuscript department of the National Library, and which has just been published in a most sumptuous volume by M. E. Babelon of the Institute, Curator of the Cabinet of Medals, at the expense of The American Numismatic Society of New York. It is the *Medallic History of Napoleon* composed by the Third Class of the Institute, the Class of Ancient History and Literature, which was the heiress, continuator, and mother of the Académie des Inscriptions et Belles-Lettres.

As to M. E. Babelon's competency and his erudition on the subject of antique medals, all are agreed. But it was not to be expected that he should have bestowed the same attention upon and should have acquired like knowledge of a period which the majority of scholars disdain as being too near and too accessible. M. Babelon has not failed to surround himself with the documents that might elucidate a question that would have been disdained by most

¹ *Les Médailles Historiques du Règne de Napoléon le Grand, Empereur et Roi*, publiées sous les auspices de la Société de Numismatique de New York, par Ernest Babelon, Membre de l'Institut. (Vignette.) Paris: Ernest Leroux, Editeur, 28 Rue Bonaparte, M.D.CCCC.XII.

of his colleagues, and, thanks to the liberality of a foreign Society, he finds himself conferring a high honor upon his own Society by restoring and rendering accessible the result of the work of its former members. If we may take the liberty of regretting that the Academy did not itself assume the expense of it, that furnishes no ground for surprise. When a few years ago the eminent administrator of the National Library obtained a considerable appropriation to buy manuscripts forming part of the collection of the Earl of Ashburnham, he chose medieval manuscripts exclusively, and deliberately rejected the papers concerning Napoleon's youth, which were acquired by Italy and placed in the Mediceo-Laurentian Library at Florence. It would have been just the same with the *Numismatic History*, and, although each year disposing of considerable sums for the most varied objects, the Académie des Inscriptions would not have found a single pinch of gold to encourage a publication which, devoted to its renovator, attests the linguistic knowledge, the acumen, the extent of the attainments of its former members, and at the same time their skill in dealing with symbols and in expressing the most complex ideas by a single figure accompanied by a motto.

Re-established in the functions assigned by King Louis the Great to the little Academy, the Third Class of the Institute had received from the First Consul and Emperor the office and mission of composing the official medals and the designating inscriptions upon public monuments. The Minister of the Interior had officially informed the Society of this on the 11th of January, 1806; but as they did not find themselves possessed of a sufficient authorization, a decree issued at the palace of Saint-Cloud on the 25th of June, 1806, formally conferred upon them the privilege "of draughting the inscriptions of the public monuments, and of proposing the subjects and legends of the medals commemorative of great events." A committee was appointed, charged with the composition of medals "to celebrate the chief events of His Majesty's government, going back to the date when he was appointed Commander-in-chief of the Army of Italy." It was formed of five members: E. Q. Visconti, Mongez, Quatremère de Quincy, Ameilhon (succeeded in 1811 by Silvestre de Sacy), Petit-Radel, and the Permanent Secretary, Dacier. It is to be noted that from a singular notion, there was placed on this Committee a man who since 1797 had figured as an enemy of Bonaparte. The language used by Quatremère was very different at this time, but the fall of the Empire restored to him what he called his liberty.

The Committee immediately set to work, and two note-books in the archives of the Institute are filled with the minutes of their deliberations from the 29th of July, 1806, to the 18th of February, 1814. One must follow in the introduction by M. Babelon, at the beginning of his book, the way in which the Committee, trying to fulfill its task, first determines the events to which a medal should be devoted; and then, "rejecting as vulgar and ephemeral the realistic style, treats all the subjects in the idealistic and allegorical style, more worthy of immortality."

After the subjects were selected, the Committee opened a discussion which proceeded, stopped, began again, was never ending, concerning each symbol and each word. The slightest shade — sometimes the most fugitive — of thought is considered, and the effort made to render it completely. Having to do with events so recent, they were frequently constrained to qualifications and compromises, which, while not formally altering history, yet sometimes took from it precise accuracy, and always what might wound. These discussions within the Committee gave rise to discourteous struggles over an expression or even a comma; but by a prodigy of toil the Committee nevertheless succeeded in deciding in six months upon fourteen subjects. Twelve subjects were submitted to the Emperor, the subject of a medal relating to the battle of Jena, as early as the 28th of October, fourteen days after the victory, — a medal

called for by the Minister of the Interior. The design was presented on the 29th of November, and at once forwarded by the Minister to the Director of the Medallic Mint to be executed. Of the other projects, all of which were submitted to the Emperor, nine were accepted, and two were returned by him to the Class,—that of the *Decennial Consulate*, as being in his opinion too like the *Consulate for Life*, and that of the *Battle of Ulm*, as not adequately characterizing that victory.

The sending of the design relating to the battle of Jena to the Director of the Medallic Mint, and the execution of this sole medal, prove the existence of a rivalry which prevented the labors of the Third Class from emerging from obscurity and reaching the public. At the same time, in fact, when the former Académie des Inscriptions had its previous functions restored to it by the will of the Emperor, Vivant-Denon, Director-General of the Museums, Director of the Medallic Mint, and *de-facto* Superintendent of Fine Arts, himself also undertook to imagine a medallic history of the Emperor, and inasmuch as he had the direction of the artists, had open accounts with the Crown Treasury, and the Mint was under his command, he caused the dies to be executed, struck the medals and distributed them. A few were ordered, says M. Babelon, "by various ministries, public administrative boards, prefects, cities, corporations and private individuals," but the greater number were submitted to the Emperor directly, and engraved and struck at the expense of the Crown Treasury.

The interest taken by Napoleon in the Medallic History begun by the Third Class of the Institute did not wane, since in 1808 he granted a sum of twelve thousand francs to the Committee for the salaries of its members, and to pay for the designs they should cause to be executed; but he does not seem to have made up his mind entirely as to the final form that he should give to their work,—whether he should have the medals engraved and struck, or whether, as in the case of the *Greek and Roman Iconography*, of which E. Q. Visconti himself was one of the editors, he should content himself with having copper plates made of the designs, to be accompanied by an explanatory text to be edited by the members of the Committee. What inclines us to the belief that he had fixed upon the latter as an alternative, is the fact that after a certain date (1812 or 1813), when he made a present to some distinguished foreigner or Frenchman of the series of the medals struck in gold, silver or bronze, under his reign, he had them enclosed in a casket covered with morocco tooled with gold, and bearing on the lid the title, *Medallic History of Napoleon*.

In order that the designs conceived by the Institute's Committee might be worthy of engraving even on copper, it was natural for the Committee to apply to a painter of note. Louis Lafitte, who certainly was one of the ablest and most thoroughly informed designers of his time, and whose fortune was by no means equal to his deserts, was first chosen, and he furnished four wash-drawings at the rate of one hundred francs per design. He has related at length his mortifications in his curious autobiography. As ever compelled to toils of which others attributed to themselves the credit, he profited no more from this order than from his collaboration on the reliefs of the Column of the Grand Army. Not being a member of the Institute, he had to yield his place to Chaudet, who was a sculptor and a member of the Class of Fine Arts. Chaudet furnished the preliminary sketches, if not the definitive designs, of the three types of the Emperor's head which were to figure on the obverse of all the medals; namely, for the medal of the Return from Egypt, radiated head facing, with the single word ORIENT for the legend; bare head, profile, for the medals of the Consular series; laureated head, profile, for the medals of the Imperial series. Chaudet died in 1810, leaving his work only begun, for all his designs had to be revised by his successor Lemot, a more skillful designer, but less docile in execution.

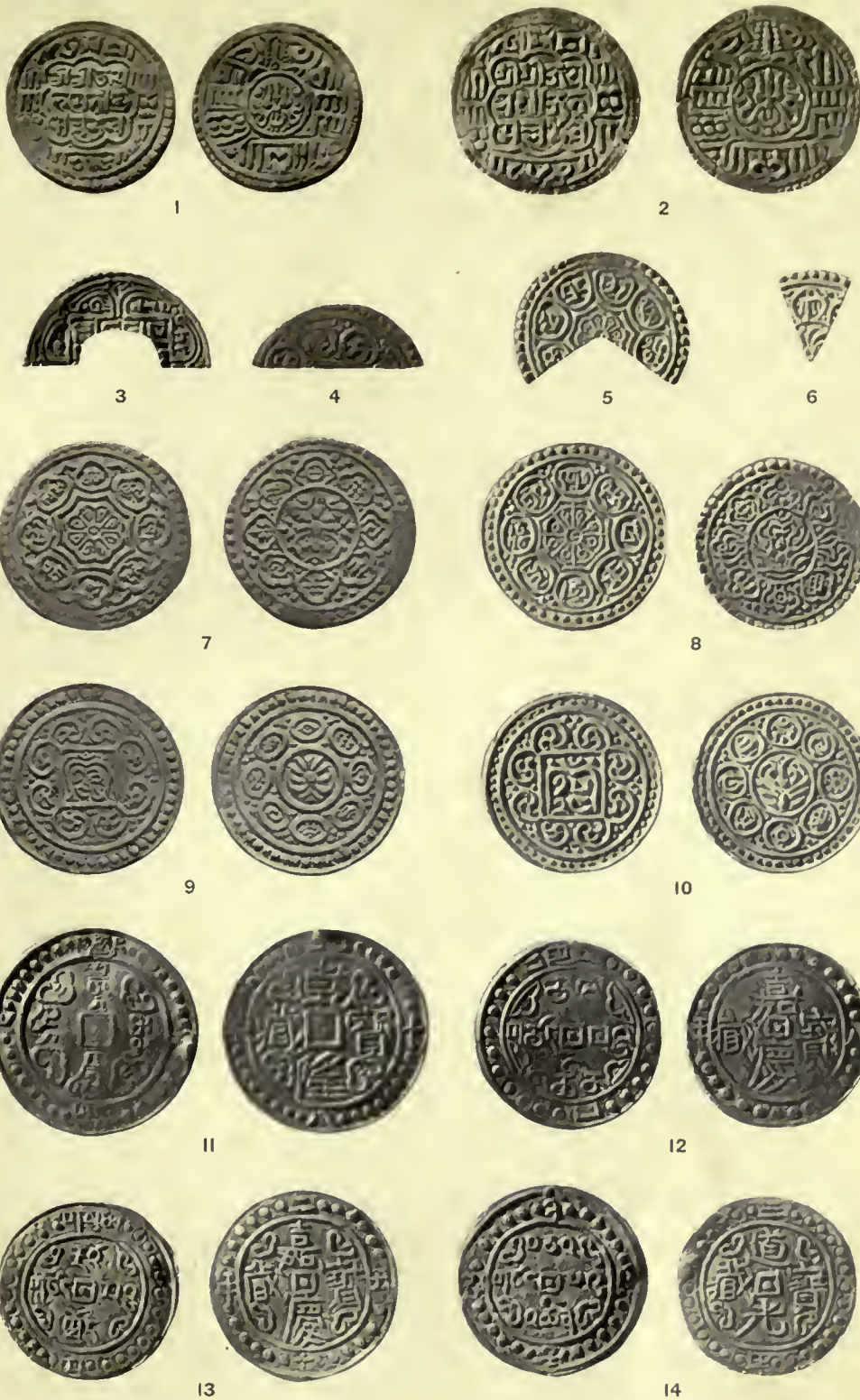
Towards the end of 1811 the first two volumes of the *Medallic History of the Emperor* were finished and bound. The first volume comprised a manuscript introduction and fifty-four designs conceived by Chaudet and completed by Lemot; volume III, finished in 1812, was to contain fifty designs; a fourth volume was under way in February, 1814. The Committee was then casting about for symbols suitable for celebrating the marriage of Napoleon with Marie-Louise. Had the Emperor been consulted, he would have suggested an abyss covered by flowers.

At this point fortune, by a strange coincidence, put a stop to the *Medallic History*. No trace would have been left of the thirty-two designs forming this fourth volume, had not the Committee, with the intention of protecting the originals, which had been magnificently bound and were intended for the Emperor, caused tracings to be made which they might easily consult. These tracings, preserved by good fortune in the Library of the Institute, have been reproduced by M. Babelon as a sequel to the one hundred and fifty-six designs executed by Chaudet and by Lemot, which latter, contained in the three magnificent volumes bearing the imperial arms, were given under rather curious circumstances to the Royal Library in 1844 by the heirs of M. Dacier, Permanent Secretary of the Third Class of the Institute under the Empire, who had preserved them and thereby perhaps saved them from destruction. Thanks to M. Ernest Babelon and to his admirable zeal, thanks to the generosity of *The American Numismatic Society* of New York, the *Medallic History of Napoleon*, reproduced entire in a form appropriate to such a work, with a luxury of typography worthy of the subject, finds itself for the future guaranteed against new vicissitudes and is assured of a duration outlasting that of bronze. If this treasure was diverted from the archives of the Institute, to the advantage of the Library, at least only a part has perished. It is a pity that as much cannot be said of the History of Napoleon's Campaigns, for which he had designs made under the direction of Vivant-Denon by some of the ablest painters of his time, which he had paid for entirely out of his privy purse, which he had ordered to be delivered to his son, and which, to-day scattered, will always be lacking in the Epic of Napoleon.

NOTICE.

It has been decided that the Society, through its Publication Committee, issue the *American Journal of Numismatics* and Transactions of The American Numismatic Society in a single volume at the end of each year. The present quarterly number will be the last issued in this form. The subscription price will remain two dollars per annum.

The Society proposes to issue, at intervals, monographs on subjects of Numismatic interest, which will be distributed to its members.





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